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The World Bank

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Report No: 38056 - PA

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$39.4 MILLION

TO THE

REPUBLIC OF PANAMA

FOR A

RURAL PRODUCTIVITY PROJECT
(PRORURAL)

February 13, 2007

Sustainable Development
Central America Country Management Unit
Latin America and Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 1, 2007)

Currency Unit	=	Panamanian Balboa
B$1	=	US$1
US$	=	B$1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ANAM	*Autoridad Nacional del Ambiente* (National Environment Authority)
CAS	Country Assistance Strategy
DBC	Department of Biological Corridors/ANAM
FM	Financial Management
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GOP	Government of Panama
ICB	International Competitive Bidding
INACOOP	*Instituto Nacional de Cooperativas* (National Institute of Cooperatives)
IPP	Indigenous Peoples' Plan
MBC-P	Panamanian Mesoamerican Biological Corridor
MEF	*Ministerio de Economía y Finanzas* (Ministry of Economy and Finance)
MICI	*Ministerio de Comercio e Industria* (Ministry of Commerce and Industry)
MIDA	*Ministerio de Desarrollo Agropecuario* (Ministry of Agricultural Development)
NCB	National Competitive Bidding
NPAS	National Protected Areas System
RPA	Rural Producer Association
PAMBC	Rural Productivity and Consolidation of the Mesoamerican Biological Corridor Project
PIP	Project Implementation Plan
POA	*Plan Operativo Anual* (Annual Operating Plan)
PRORURAL	Rural Productivity Project
QCBS	Quality and Cost-based Selection

Vice President:	Pamela Cox
Country Director:	Jane Armitage
Sector Manager:	Mark Cackler
Task Team Leader:	Matthew A. McMahon/Edward W. Bresnyan

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PANAMA

RURAL PRODUCTIVITY PROJECT

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PANAMA

RURAL PRODUCTIVITY PROJECT

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSAR

Date: February 13, 2007 Country Director: Jane Armitage Sector Manager/Director: Laura Tuck Project ID: P064918 Lending Instrument: Specific Investment Loan	Team Leaders: Matthew A. McMahon/Edward W. Bresnyan Sectors: General agriculture, fishing and forestry sector (75%);Agricultural marketing and trade (15%);Agro-industry (10%) Themes: Rural markets (P);Export development and competitiveness (P);Technology diffusion (P);Other rural development (S) Environmental screening category: Partial Assessment
Global Supplemental ID: P083045 Lending Instrument: Specific Investment Loan Focal Area: B-Biodiversity Supplement Fully Blended?: No	Team Leader: Gerardo Segura Warnholtz Sectors: General agriculture, fishing and forestry sector (75%);Sub-national government administration (15%);Central government administration (10%) Themes: Biodiversity (P);Small and medium enterprise support (P);Participation and civic engagement (P);Rural non-farm income generation (S);Decentralization (S)

Project Financing Data

[X] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans:
Total Bank financing (US$m.): 39.4
Proposed terms: Fixed-Spread Loan (FSL) in US dollars with a final maturity of 15 years, including five years of grace period.

Financing Plan (US$m)

Source	Local	Foreign	Total
BORROWER	1.90	0.00	1.90
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	38.20	1.20	39.40
LOCAL FARMER ORGANIZATIONS	5.60	0.00	5.60
Total:	45.70	1.20	46.90

Borrower:
Ministry of Economy and Finance
Via Espana Calle 52
Panama
Fax: 507-269-5863
Ministry of Finance
Panama

Responsible Agency:
Ministry of Agricultural Development
Calle Manuel Melo
Altos de Curundu, Edificio 576
Panama
Panama

Estimated disbursements (Bank FY/US$m)									
FY	2008	2009	2010	2011	2012	2013			
Annual	3.94	5.91	9.85	9.85	5.91	3.94			
Cumulative	3.94	9.85	19.70	29.55	35.46	39.40			

GEF Estimated disbursements (Bank FY/US$m)									
FY	2007	2008	2009	2010	2011	2012			
Annual	1.10	1.20	1.50	1.20	0.70	0.30			
Cumulative	1.10	2.30	3.80	5.00	5.70	6.00			

Project implementation period: Start July 2, 2007 End: July 31, 2012
Expected effectiveness date: July 30, 2007
Expected closing date: January 31, 2013

Does the project depart from the CAS in content or other significant respects? ***Ref. PAD A.3***	[ ]Yes [X] No
Does the project require any exceptions from Bank policies? ***Ref. PAD D.7*** Have these been approved by Bank management? Is approval for any policy exception sought from the Board?	 [ ]Yes [X] No [ ]Yes [ ] No [ ]Yes [ ] No
Does the project include any critical risks rated "substantial" or "high"? ***Ref. PAD C.5***	[X]Yes [ ] No
Does the project meet the Regional criteria for readiness for implementation? ***Ref. PAD D.7***	[X]Yes [ ] No

Project development objective ***Ref. PAD B.2, Technical Annex 3***

The **Project Development Objective** of the proposed Rural Productivity project (PRORURAL) is to contribute to increased productivity among organized rural small-scale producers and through their participation in productive alliances, while ensuring the sustainable use of natural resources and the conservation of globally important biodiversity.

Key results indicators include: (i) by EOP, at least a 25% increase in sales receipts of small-scale producers via PRORURAL-financed productive alliances; (ii) by EOP, at least 40%

increase in net revenues for the participating RPAs via the productive alliance; (iii) by EOP, at least a 20% increase in membership in RPAs for the project area, relative to baseline; and (iv) by EOP, 10% reduction in area under annual crops and cattle in project area on land appropriate for forestry uses.
Global Environment objective ***Ref. PAD B.2, Technical Annex 3*** The Project Global Environmental Objective is to conserve globally important biodiversity and protected forest, mountain, coastal and marine ecosystems in Panama.
Project description ***Ref. PAD B.3.a, Technical Annex 4*** Component 1 -- Support for Productive Alliances -- would finance preparatory activities that contribute to the presentation of viable business plans for proposed productive alliances. Component 2 -- Productive Alliances -- would finance approximately one hundred subprojects, implemented by RPAs, as part of the overall execution of approved business plans for productive alliances. Component 3 -- Environmental Subprojects and Strengthening of NPAS -- would finance small-scale investments in natural resource management and productive opportunities, proposed and implemented by community and producer associations. Component 4 -- Administration, Supervision, Monitoring and Evaluation -- would include incremental operational costs of MIDA in the execution of PRORURAL, including goods and services required for the establishment of a monitoring and evaluation system.
Which safeguard policies are triggered, if any? ***Ref. PAD D.6, Technical Annex 10*** Environmental Assessment (OP 4.01). Natural Habitats (OP 4.04) and Forests (OP 4.36). Pest Management (OP 4.09). Cultural Property (OP 11.03). Involuntary Resettlement (OP/BP 4.12). Indigenous Peoples (OP/BP 4.10).
Significant, non-standard conditions, **if any**, for: ***Ref. PAD C.7*** Board presentation: None Loan effectiveness: None Covenants applicable to project implementation: None

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

Panama is a nation of stark contrasts. With a population of about 3 million and per capita Gross Domestic Product (GDP) that ranks it as an upper-middle income country, Panama's extreme income inequality is such that some 40 percent of the population lives in poverty, with another one-sixth being destitute. In the backdrop of Panama City's modern skyline and comforts, slightly more than one-half of the country's rural residents live below the poverty line, as do one-fifth of city dwellers.

In June 2005, the Government of Panama (GOP) put forth its five-year vision for the economic and social development of the country. The strategy seeks to reduce poverty by 20 percent by 2009 through an emphasis on fiscal responsibility, good governance and accelerated export-led growth in order to increase investment and generate employment. The five pillars of the GOP's economic and social development policy are:

i. *Reducing poverty and improving income distribution* by spurring higher, job-creating economic growth through market-based economic policies, developing human capital, and fostering productivity, especially in agriculture;

ii. *Creating employment through economic growth policy* by opening to international competition, developing export infrastructure, removing distortions and reducing transaction costs for investors, including through improved urban transport;

iii. *Reforming public finance* via more accurate and transparent budget accounting, deficit reduction, and improved expenditure management;

iv. *Developing human capital* by increasing the competitiveness of Panama's labor force while making health and education services an engine for reducing inequality; and

v. *Reforming and modernizing the State* by transforming the public sector into a facilitator of development that serves Panama's citizens.

In parallel, the GOP's agricultural strategy, set forth in the *2005-2009 Agricultural Strategic Plan* "Let's Get to Work" (*Manos a la Obra*), seeks to improve producers' ability to compete through increasing yields, reducing unit production costs and energizing employment, thereby contributing to a reduction in rural poverty. The strategy envisions a prosperous, competitive, profitable and sustainable agricultural sector that contributes to the development of the whole country by increasing employment levels and improving Panamanians' quality of life, especially that of rural families. Specifically, the strategy aims to:

i. develop agricultural producers and their organizations;

ii. increase production and improve competitiveness through increased yields and lower unit costs;

iii. promote agricultural transformation oriented toward demand and linked to agro-exports, agro-industry and technological innovation;

iv. meet the needs of the marginalized rural populace via socioeconomic programs that improve the quality of life for rural families, with emphasis on indigenous areas; and

v. promote institutional strengthening for the development of the agricultural sector.

Underlying the Government's agriculture and rural strategies are the following principles that form the foundation for the proposed project:

Productivity and profitability: Achieving permanent improvements in rural income and well-being will require increased productivity for both agricultural and non-agricultural activities. Rural producers must adopt instruments and methods to more efficiently use available resources, thereby ensuring the profitability and competitiveness of their production. As noted in the Panama Public Expenditure Review (PER): Rural Development and Agriculture (2006), there appears to be little systematic targeting according to the GOP's poverty reduction objectives or according to considerations of comparative advantage. As such, the agricultural sector faces significant challenges from trading partners and needs to improve productivity and modify the composition of its basket of products in order to realize its comparative advantage.

The PER also reports on indicators of the competitiveness of Panamanian agricultural products (i.e., nominal protection rates) which were recently calculated by the Institute for Agricultural Marketing (IMA). In general, the sector has difficulty competing in international markets. The least competitive products appear to be onions, raw sugar, potatoes, and milk. While calculation of domestic resource cost coefficients (DRCs) would yield more information as to comparative advantage, this preliminary work nonetheless indicates that there is significant protection in the sector and therefore many products are unlikely to be competitive. Ongoing free trade negotiations with the United States raise the importance of improving agricultural productivity and its competitiveness, regardless of the outcome of these and other trade agreements.

Associations: The small farmer, acting alone, is unlikely to effectively compete in a market dominated by intermediaries with asymmetric bargaining power and information. Conversely, participation in a production chain can provide stable, reliable and more remunerative market access. The proposed project would promote small farmer participation in associations, and seek to incorporate them into *productive alliances,* thereby improving market access. A *productive alliance* is the main mode or mechanism through which producers with potential can participate in production chains that will help them improve their productivity by giving them better and more equitable access to markets, technologies, and organizations. A *business plan* is the instrument upon which an alliance would be evaluated and supported.

Demand: The proposed project must respond to demand; there must be a market for the activities to be funded, which would be satisfied by the respective productive alliance.

Business management: A transformation of traditional, low-productivity agriculture is needed into more modern, commercial agriculture that creates jobs and growth potential. A culture of formally-established businesses with contractual obligations will be fostered, within which producers with potential will assume business responsibilities. Within this context, the business plan is a crucial instrument.

Shared risk: At present the small-scale producer assumes the typical risks of farming, as well as the risk of not selling his product, or selling it without recovering costs. Productive alliances provide a way for the different components of a productive chain (e.g., rural producers, agribusinesses, marketing firms, other service providers) to share the production risks, especially in agriculture.

Equity: The project targets small farmers with production potential and, therefore, with potential for creating jobs. Equity among partners in the producer chains will be promoted through alliances, so that organized producers can more effectively negotiate a more equitable share of the profits. This will help to decrease the conditions of inequality within Panama's economy.

Natural resource sustainability and biodiversity conservation: The project – primarily through a partially-blended operation funded by the Global Environmental Facility (GEF) – will actively promote biodiversity conservation and natural resource sustainability, with significant overall impact, through cooperating in the implementation of plans for handling protected areas and special management areas established by the National Protected Areas System (NPAS). Mechanisms for paying for environmental services (PES) will be promoted to strengthen the links between markets and the sustainable exploitation and conservation of natural resources.

The proposed IBRD operation, together with the partially-blended GEF operation, specifically addresses key threats facing Panama and its natural resource base by reducing: (i) **push factors**, such as natural resource depletion, deforestation and rural poverty, which spur human migration to the areas of global conservation importance within the Panamanian Mesoamerican Biological Corridor (MBC-P); and (ii) **pull factors** (e.g., over-exploitation, illegal harvesting, lax enforcement regime) by consolidating and strengthening the implementation of existing management plans to ensure the conservation of globally significant biodiversity. Greater decentralized management of NPAS would be directly fostered, as would more effective implementation of existing management plans in selected protected areas of the NPAS, in line with the objectives of Panama's primary environmental legislation (*Ley 41*).

Both the proposed project and the partially-blended GEF operation deploy a demand-driven mechanism in order to leverage local communities in addressing these factors. Rural producer associations, under the proposed IBRD operation, would implement small-scale investments to increase their market orientation and value-added, in an effort to reduce the push factors that advance the agricultural frontier, especially in the Pacific region. Investments in frontier communities and the adoption of more environmentally compatible and sustainable land uses would also stabilize the agricultural frontier and reduce pressures on sites of key environmental importance. The GEF operation finances small-scale environmental subprojects proposed and implemented by community associations to conserve biodiversity of global significance and,

combined with a greater role in the co-management of protected areas, would contribute to reducing the pull factors that have led to natural resource depletion and degradation in protected areas of Panama.

Targeting: The project targets small-scale rural producers in the provinces of Herrera, Los Santos and Veraguas, based on their untapped productive potential and given that other provinces of Panama already have specialized regional development programs that fulfill their requirements and priorities. Mean Monthly Income of the Working Population in these provinces is significantly below the national average: Herrera, -29 percent; Los Santos, -36 percent; and Veraguas, -52 percent. Some nine of eleven districts in Veraguas alone had poverty rates greater than 70 percent in 1990, with eight of these exceeding 80 percent. As of 2003 (the most recent data available), these same districts maintained these high levels of poverty. Furthermore, selected districts in Veraguas have levels of extreme poverty nearly twice that of the national average (Panama Poverty Maps 2005 and Panama Poverty Assessment 2006).

The three provinces are home to 70,000 farms with 130,000 cultivated hectares (100,000 rain fed and 30,000 under permanent crops) yet employ only 22,000 agricultural workers. There are 68,000 farmers, from small-scale and medium sized producers to peasants or farmers, who work their own or leased land; many also work for a daily wage. There is about one farm worker for each five hectares of cropped fields or 50 hectares of farmland. Some 13,000 farms have between 5 and 20 hectares, with a total area of 133,000 hectares (between crops, cattle raising, and other uses). As mentioned before, this group comprises most of the small-scale and medium-sized farmers who have potential for commercial cropping who sow only about 25 percent of their land and sell their production directly on local and regional markets, without much value-added.

2. Rationale for Bank involvement

Bank support to Panama waned in the late 1990s. The last Country Assistance Strategy (CAS) for Panama, covering FY99-01, was discussed at the Board in October 1998. National elections were then held in May 1999. Over the next administration (Sept. 1999-Aug. 2004), economic growth and policy reform slowed and the Government turned increasingly to capital markets for financing, leaving much of the CAS unimplemented. Ongoing Bank-financed project execution languished and policy dialogue with the Bank shrank to a few areas of active lending with decreasing attention to cross-cutting concerns.

Since the Torrijos Administration took office in 2004, there has been renewed interest on its part to engage the Bank vis-à-vis further lending operations. The Interim Strategy Note (August 30, 2005) responds to this demand by the GOP and includes the proposed operation. The current Bank portfolio for Panama – specifically the Land Administration Project (Ln 7045-PA) and the Basic Education II Project (Ln 7032-PA) – already strongly targets the rural sector and would complement the proposed activities under PRORURAL. Additionally, Gini coefficients confirm the deep and growing income gap between urban and rural Panama; as such, the interventions under the proposed project would seek to contribute to closing this gap, while building on best-practice experiences throughout the region.

The Bank has been active in financing greater market access for rural producers via productive alliances in several countries in the region. In Colombia, the Rural Productive Alliances Project (Ln. 7097-CO), since 2002, has financed 85 productive alliances benefiting some 8,300 small-scale producers for a total investment of US$134 million. Similar operations in Bolivia (Rural Alliances Project – Cr. 4068-BO, effective May 2006) and Brazil (Pará Integrated Rural Development Project – P082651, approved by the Board in December 2006) have also been leveraged in the design features of the proposed operation.

3. Higher level objectives to which the project contributes

The proposed project is fully consistent with the Panama Interim Strategy Note (August 2005) and the Rural Strategy for Latin America and the Caribbean (Reaching the Rural Poor in the Latin America and Caribbean Region, July 2002). Specifically, the project operationalizes three of the five pillars of the Government's 2005-2009 development strategy (i.e., poverty reduction, creating employment and developing human capital) and, through the targeted delivery mechanisms, contributes to the remaining two (i.e., reforming public finance, reforming and modernizing the State). Furthermore, productivity gains, combined with more and stronger rural producer associations to raise competitiveness, are the tenets of the GOP's agricultural strategy. The proposed operation has been designed to contribute to this strategic vision for the sector.

Link to the partially-blended GEF operation. The Rural Productivity and Consolidation of the Atlantic Mesoamerican Biological Corridor Project (PAMBC), approved by the Board in June 2006 and financed with a US$6.0 million GEF grant, is partially blended with the proposed IBRD operation. Loan proceeds under the proposed IBRD operation (i.e., US$10 million for activities under Component 3, as detailed below) would co-finance the PAMBC project. The proposed IBRD operation would primarily finance a matching-grants scheme for rural producer associations in order to foster the formation and consolidation of productive alliances, thereby increasing market access, producer incomes and rural employment. The GEF grant does not co-finance any activities under the IBRD operation. GEF resources would, however, complement the investments under the IBRD loan through (i) incremental support to NPAS to build local capacity for environmental management; (ii) pilot initiatives in PES to boost own-revenue generation by ANAM; and (iii) environmental subproject investments for community associations in protected areas and buffer zones.

B. PROJECT DESCRIPTION

1. Lending instrument

The total project cost of the proposed operation is US$46.9 million. A Specific Investment Loan (SIL) of US$39.4 million is proposed, with counterpart financing from the GOP of US$1.9 million, along with counterpart contributions from Rural Producer Associations (RPAs) of US$5.6 million. The project would be partially blended with the Rural Productivity and Consolidation of the Atlantic Mesoamerican Biological Corridor project, which is financed via a GEF grant of US$6.0 million and US$10.0 million in complementary financing from the proceeds of the proposed IBRD loan. The GEF grant was presented separately to the Board and approved in June 2006.

2. Project development objective and key indicators

The **Project Development Objective** of the proposed Rural Productivity project (PRORURAL) is to contribute to increased productivity among organized rural small-scale producers, through their participation in productive alliances, while ensuring the sustainable use of natural resources and the conservation of globally important biodiversity.

Key results indicators include: (i) by EOP, at least a 25 percent increase in sales receipts of small-scale producers via PRORURAL-financed productive alliances; (ii) by EOP, at least 40 percent increase in net revenues for the participating RPAs via the productive alliance; (iii) by EOP, at least a 20 percent increase in membership in RPAs for the project area, relative to baseline; and (iv) by EOP, 10 percent reduction in area under annual crops and cattle in project area on land appropriate for forestry uses.

3. Project components

Component 1 – Support for Productive Alliances (US$7.6 million) – would finance preparatory activities that contribute to the presentation of viable business plans for proposed productive alliances. Such activities include: (i) a communication strategy designed to raise awareness of and stimulate participation in PRORURAL; (ii) business skills and organizational training for small-scale producers; (iii) "training of trainers" to qualify technical service providers for work with RPAs; (iv) the preparation of productive alliance proposals (*perfiles de negocio*), business plans (*planes de negocio*) and subprojects, all presented by RPAs; and (v) specific technical studies and consultancies that would contribute to the implementation of PRORURAL and the execution of approved business plans.

Component 2 – Productive Alliances (US$24.7 million) – would finance approximately seventy subprojects (up to a maximum of US$500,000 each), implemented by RPAs in the targeted provinces of Herrera, Los Santos and Veraguas. Subprojects would be financed in the context of business plans for productive alliances between RPAs and at least one agroprocessor, wholesaler or other commercial partner. Subprojects would include: fixed capital (e.g., plant and equipment, minor infrastructure), working capital and technical assistance. Subproject finance – limited to the first two years of the approved business plan – would be guided by procedures outlined in the Project Operational Manual (see Annex 4 for details). RPAs would contribute a minimum of 10 percent toward subproject cost (either in cash or in-kind). The proposed project would reach some 5,000 small-scale producers (i.e., farm holdings of 0.5 to 20 hectares) or about 13 percent of total small-scale producers in these three provinces.

Component 3 – Environmental Investments and Strengthening of NPAS (US$11.4 million) – executed by ANAM under the partially-blended PAMBC project, would provide matching grants for about 450 small-scale investments in natural resource management and productive opportunities that contribute to the conservation of biodiversity of global significance and represent viable and sustainable alternatives to improve their livelihoods. Subproject investments would be proposed and implemented by community and producer associations in the fourteen targeted protected areas and associated buffer zones. The component would also finance support services to these associations (e.g., mobilization, training, technical assistance) to facilitate their subproject preparation. Community and producer associations would contribute at least 10

percent of total subproject cost (in cash or in-kind). Subproject agreements governing the use of project resources would be signed between the beneficiary associations and ANAM.

Component 4 – Project Management, Monitoring and Evaluation (US$3.2 million) – would include incremental operational costs of MIDA in the execution of PRORURAL, including goods and services required for the establishment of a monitoring and evaluation system.

Table 1: Project Costs by Component and World Bank Financing

Project Component	Cost, Incl. Contingencies (US$ million)	% of Total	World Bank Financing (US$ million)	% World Bank Financing
1. Support for Productive Alliances	7.6	16.3%	7.1	18.0%
2. Productive Alliances	24.7	52.6%	19.8	50.2%
3. Environmental Investments and support to the NPAS	11.4	24.2%	10.0	25.4%
4. Project Management, Monitoring and Evaluation	3.2	6.8%	2.5	6.3%
Total Project Cost	**46.9**	**100.0%**	**39.4**	**100.0%**

4. Lessons learned and reflected in the project design

From similar operations in other Latin American countries (e.g., Pará Integrated Rural Development and the Northeast Rural Poverty Reduction Program in Brazil, the Productive Alliances Project in Colombia) and building on the experience from both the previous Rural Poverty and Natural Resource Management Project and the PAMBC Project, the following lessons have been distilled:

- *Verifiable market opportunities* must underpin proposed support for poor rural producers. The proposed project would require demonstration of pre-defined markets as one of the eligibility criteria for the productive alliances to be financed.

- *Participation* by beneficiaries (i.e., RPAs) in the selection, financing, execution, operation and maintenance of investments can generate cost savings and increase ownership, thereby improving the sustainability of these investments. This approach represents a major design feature of under the proposed project.

- *Sustainability of project investments* is enhanced by stakeholder cost-sharing, beneficiary involvement in local public investment allocations, and provision of technical assistance throughout the subproject cycle.

- *Clearly defined "rules of the game"* that orient local participation, define technical criteria for business plan preparation and subproject selection and delineate the responsibilities of all stakeholders, can promote greater transparency in project implementation and reduce the probability of discretionary decision-making. The proposed project would detail these rules of the game in a Project Operational Manual and undertake a communications strategy to disseminate project information to intended beneficiary RPAs and inform them of ways to participate.

- *Rigorous selection, preparation, technical assistance and supervision* maximize the commercial potential and sustainability of income-generating subprojects.

- *Standardization of subproject documents, technical designs and unit costs* simplifies the subproject preparation and evaluation process, improves the quality of subprojects, facilitates the procurement of goods and works, minimizes over-design and enables participation by poorer, nascent RPAs.

- *Building capacities for business management and administration* among RPAs is a key element for successful long-term productive alliances. The project addresses this through training and capacity-building financed under Component 1, as well as the preparation and dissemination of a positive list of technical service providers from which RPAs can contract needed assistance for business plan design and subsequent subproject execution.

5. Alternatives considered and reasons for rejection

- *A follow-on Rural Poverty Reduction project*: In 2004, under the GOP five-year development strategy, other instruments for reducing rural poverty were introduced, including the United Families (*Familias Unidas*) Program, a cash transfer system with payments conditioned on the adequate use of health and education services; improved coverage of these services; and strengthening of local governments to provide crucial community services. Preparation studies for the proposed project also recommended targeting "surplus producers" (with potential for commercial production, growth, and job creation) as a more effective way of reducing rural poverty than funding community schemes aimed at poor households and subsistence farmers with low production capacity and potential. Therefore, the Government of Panama specifically requested Bank assistance in designing and financing support to rural producer associations in order to raise productivity and improve their ability to access commercial markets.

- *A stand-alone IBRD operation:* Pursuit of this approach would forego a significant opportunity to leverage funding for global biodiversity conservation and preservation with IBRD resources for greater rural productivity and improved incomes, thereby generating substantial benefits for both the rural population and the global commons.

- *A nationwide project in support of productive alliances*: The project targets the three provinces of Herrera, Los Santos and Veraguas, based on their productive potential and because the other provinces of Panama already have specialized regional development programs that fulfill their requirements and priorities (e.g., the Darién, Bocas del Toro, and Chiriquí programs funded by IDB, *Triple C* (Coclé, Colón, Capira) and another in the Ngöbe-Buglè district, both funded by FIDA).

C. IMPLEMENTATION

1. Institutional and implementation arrangements

Executing Entities:

Productive Alliances: are composed of a RPA and at least one commercial partner (e.g., wholesaler, agroindustry, processors). The productive alliance would jointly identify a mutually beneficial market opportunity, detailed in the form of a *business plan*, which would also include a feasibility assessment. Once approved, that portion of the business plan executed by the RPA and financed with proceeds from the proposed project (i.e., the subproject) would be formalized through a subproject agreement, signed by the RPA and MIDA (see below). Implementation of the business plan would be the responsibility of all partners in the Alliance. The RPA would be responsible for subproject execution. Arrangements for the formalization of the productive alliance would be detailed in the Project Operational Manual and would be a prerequisite for subsequent subproject financing under the proposed Business Plan.

Rural Producer Associations (RPAs): are rural citizens who have organized into legally-constituted civil associations for the common interest of improving their productivity, competitiveness and market orientation. In the context of a productive alliance with wholesalers, processors and agroindustry, RPAs identify, prepare and implement their business plan and associated subproject, assisted by technical specialists whom they contract directly. Potential RPAs would include both agricultural and non-agricultural producers, organized in associations, cooperatives, unions or any other form of representative organization of civil society, with legal standing (or in the process of obtaining it). RPAs would contribute a minimum of ten percent (in cash or in-kind) toward the total cost of subproject implementation.

Ministry of Agricultural Development (MIDA): executes the project and sets forth the norms and guidelines for the participation of RPAs and wholesalers, processors and agroindustry in the Project Operational Manual. MIDA has a regional staff in the project area and would accompany and promote the execution of investments in support of proposed productive alliances.

Subproject Cycle: Productive Alliances

- Following a promotion and dissemination campaign in the project area, RPAs present proposals (*perfiles*) for productive alliances to MIDA, following standard formats included in the Project Operational Manual;

- RPAs, in concert with the other parties of the proposed productive alliance and contracting technical service providers as needed, would further develop approved *perfiles* into Business Plans, including subproject proposals, and submit them to the MIDA for review;

- MIDA evaluates the Business Plan for the proposed productive alliance and associated subproject for their technical, financial, institutional, social and environmental feasibility and recommends approval;

- For the subproject to be executed by the RPA, a subproject agreement is signed between the RPA and MIDA outlining the use of project resources, and the rights and responsibilities of the RPA;

- MIDA transfers resources to the RPA for subproject execution according to the Business Plan;

- RPAs contract goods, works and services, in accordance with the norms established in the Project Operational Manual.

Project Oversight: The Borrower for the proposed project is the Republic of Panama, represented by its Ministry of Economy and Finance (MEF). MEF delegates day-to-day project implementation to the Ministry of Agricultural Development (MIDA).

A *Steering Committee*, comprised of representatives of MEF, MIDA, MICI, ANAM, INACOOP and the private sector, would oversee the global execution of PRORURAL and provide guidance on its overall scope. Its duties would include: (i) approval of annual operating plans (POAs); (ii) oversee overall project performance; and (iii) suggest necessary project adjustments based on results of the monitoring and evaluation system.

Project Coordination: MIDA would coordinate three of the project components: Support to Productive Alliances, Productive Alliances; and Project Management, Monitoring and Evaluation. The remaining component – Environmental Investments and Support to NPAS – would be coordinated and monitored by ANAM, through its Department of Biological Corridors (DBC/ANAM) and under the partially-blended GEF operation. The proposed project would be led by a Coordinator and assisted by a cadre of technical specialists, an administrator, training officer, monitoring and evaluation specialist, area coordinators, a financial expert, and an accountant. MIDA would (i) prepare annual operating plans (POAs) and all project reports as agreed with the Bank and the Steering Committee; (ii) evaluate and approve for financing those business plans proposed by prospective productive alliances; (iii) conduct the overall project financial management; and (iv) carry out the project's monitoring and evaluation system with support from other MIDA agencies.

Subprojects under Components 2 and 3 would be implemented by RPAs and community associations. Once subprojects have been identified, prepared and approved for funding, an agreement will be signed between MIDA (Component 2) or ANAM (Component 3) and the beneficiary association, which will specify the activities to be performed, total subproject financing and the disbursement calendar. These beneficiaries will be responsible for procurement activities to be performed during the subproject implementation, as well as administering funds, preparing reports, and managing payments to contractors.

Productive Alliance Facilitators (PAFs): will be contracted by MIDA as its principal interface with the intended beneficiaries in the project area of Herrera, Los Santos and Veraguas. The PAF would stimulate project participation and aid in the formation of RPAs (as needed), the preparation of the initial *perfil de negocio* (business proposal) and eventual Business Plan.

Technical Service Providers: MIDA would finance the training and subsequent certification of qualified service providers to assist RPAs in forming productive alliances and preparing and implementing Business Plans and subprojects. MIDA would maintain a positive list of Technical Service Providers and make it available to RPAs in the project area. RPAs would contract directly these Technical Service Providers, as needed, during Business Plan preparation and subproject execution. The positive list would also form part of the ongoing communication strategy for PRORURAL.

Project Operational Manual: would guide overall project implementation and include all processes, rules and regulations for the implementation of project components. The Operational Manual was reviewed by the Bank during Negotiations and found to be satisfactory. The Project Operational Manual would include: (i) physical performance indicators to be tracked through the Project Monitoring and Evaluation System; (ii) the criteria for targeting activities under Components 1, 2 and 3; (ii) the responsibilities of RPAs, MIDA and other partners in the implementation of business plans for the productive alliances; (iii) the criteria and procedures for business plan appraisal, whether economic, financial, environmental, institutional, social or technical; (iv) standard project designs and their role in the appraisal of proposals submitted by RPAs; (v) model forms for subproject agreements; and (vi) standard forms for business plan proposals to be submitted by potential beneficiary RPAs. A user-friendly synthesis of the Project Operational Manual would be made available to RPAs and prospective Productive Alliances.

Accounting, financial reporting and auditing arrangements: During preparation, the Financial Management (FM) system was assessed by a Bank FM Specialist and judged to be satisfactory. MIDA, through its Financial Unit, and ANAM, through DBC/ANAM and its financial agent, will be directly in charge of FM tasks for their respective components. These will include: (i) budget formulation and monitoring; (ii) cash flow management (including processing payments with the funds administrator, and submitting grant withdrawal applications to the Bank); (iii) maintenance of accounting records; (iv) preparation of in-year and year-end financial reports, (v) administration of underlying information systems; and (vi) arranging for execution of external audits (see Annex 7).

According to arrangements for Bank-financed projects in Panama, the annual audit of the project accounts for the period January 1 to December 31 will be carried out by independent auditors contracted under Terms of Reference acceptable to the Bank. The audit report will be submitted to the Bank no later than June 30 in the year following that for which the project accounts are audited. The year-end Financial Report will also serve as the Financial Statement of the Project, on which the independent auditors will express their opinion. The annual audit will also include a review of the eligibility of expenditures disbursed on the basis of Statements of Expenditure (SOEs), as well as on the Special Account, compliance with all financial covenants and a Management Letter on internal controls and recommendations. MIDA will comply with Panamanian standards, in line with norms and guidance of the International Federation of Accountants (IFAC), which are acceptable to the Bank.

2. Monitoring and evaluation of results

Project implementation will be guided by a Results Framework (see Annex 3). MIDA will have overall responsibility for the Monitoring and Evaluation of project activities and manage data

inputs from the proposed rural productive alliances. MIDA and DBC/ANAM would maintain a simple financial system to compile project financial statements, using a computerized financial management system. The system would have the ability to classify financial information by project component, categories of disbursement and sources of financing; and produce useful financial reports (such as interim financial reports-IFRs and Statements of Expenditures -SOEs). The M&E process will function as both a mechanism for assessing project impacts and a day-to-day management tool. The M&E system will also support the project supervision process by ensuring that baseline and follow-up data for the key performance indicators are collected and made available on an ongoing basis and at strategic times including project start-up (underway before project effectiveness), mid-term review and project closing.

The physical implementation of the project would be monitored based on the specific outputs and monitoring indicators for the project components as defined in the Results Framework. Information from the monitoring system would be analyzed by project management and disseminated according to the project's communication strategy to appropriate stakeholders. The project would provide project progress reports quarterly and an update on legal covenants compliance every six months to the Bank.

Annual beneficiary evaluations are planned and quarterly project reporting will allow semiannual supervision missions to assess the status of obtaining key project outcomes. A mid-term review would be conducted no later than two years after the first disbursement and would: (i) assess the degree of advancement in achieving project outcomes; (ii) evaluate the institutional arrangements for project implementation; (iii) determine updates, as needed, to the project operational manual; and (iv) review the Annual Operating Plan. A final evaluation will be conducted in the last semester of project execution to assess overall achievement of expected project results and to use these results to design a strategy for future replication.

3. Sustainability

Sustainability of project impact will be achieved through the project's support to the participatory process at every level – government institutions, communities and beneficiaries. The primary project beneficiaries – Rural Producer Associations – play a key role in decision making, implementation, and cost sharing, thus increasing ownership. Furthermore, the roster of technical service providers established by MIDA would ensure quality design and execution of business plans and subprojects by RPAs, which also contributes to their expected sustainability. Subproject agreements – signed between RPAs and MIDA and other parties to the productive alliance – would detail procedures for the continued operation and maintenance of these subprojects and methods for cost recovery. These activities will ensure the institutional and financial sustainability of project impacts. The project would encourage private, third-party participation in the provision of technical assistance and capacity-building, on behalf of the RPAs, in line with ongoing institutional adjustments within MIDA to position it more effectively for greater economic openness in Panama.

Given the clear focus of the project in building the capacity of RPAs to successfully participate in productive alliances as a means of increasing their market access and incomes, a key factor of sustainability will be the up-front quality control of financing those business plans with the verifiably viable proposals. In the end, successful businesses are sustainable businesses.

4. Critical risks and possible controversial aspects

Risk to PDO/GEO	*Mitigation Measures*	*Rating after Mitigation*
Inadequate national government commitment, budget and institutional support to execute the proposed project.	Annual counterpart financing by GOP is modest to ensure fiscal viability.	**L**
Insufficient political will to support project activities through adequate and appropriate coordination among executing entities	The institutional structure for project execution is fully accepted and supported by the Government. Effective communication and positioning of the project would ensure political support.	**M**
Risk to component results	***Mitigation Measures***	***Rating after Mitigation***
Poor coordination between MIDA and its regional offices hinders Project execution.	The demand-driven process of productive alliance formation and business plan development is more a function of an effective communication strategy throughout project implementation and capacity-building for both RPAs and technical service providers – all supported by project activities.	**L**
Political interference disrupts the transparent allocation of project resources to potential productive alliances.	A widely disseminated and inclusive communication strategy would raise awareness of the project's objective and means of accessing its benefits. Clear "rules of the game" detailed in the project operational manual would dictate project implementation and resource allocation.	**M**
RPAs unable to successfully implement quality business plans and subprojects	Component 1 will finance necessary technical assistance to RPAs for subproject preparation and implementation. MIDA will maintain a "positive list" of technical service providers to facilitate adequate access to needed advisory services by RPAs. Project design incorporates good practice from the region on subproject delivery, as well as best-practice in local procurement and implementation from other projects in the region.	**M**
Inadequate cooperation of local authorities (mayors, municipal councils, representatives of *corregimiento*) and central government officials.	Promotional activities prior to project implementation and *convenios* (Agreements) among institutions involved. Continuous communications flow among institutions and agencies.	**M**

Insufficient coordination between MIDA and ANAM hinders implementation of environmental subprojects.	ANAM solely administers the flow of funds for environmental subprojects under Component Three; coordination with MIDA is operational in nature and clearly set forth in the Project Operational Manual, to which both ANAM and MIDA would adhere. Subproject implementation is primarily the responsibility of community associations and RPAs, which have already demonstrated sufficient capacity.	**L**
Insufficient procurement capacity of RPAs and MIDA hinders project execution	During project preparation, Bank procurement specialist conducted capacity assessment and developed a time-bound action plan to build capacity of RPAs and MIDA. Procurement specialist will participate in supervision missions to proactively address procurement concerns during project execution.	**H**
Low financial management capacity on the part of MIDA, through its Financial Unit, hinders project execution.	During project preparation, Bank FM specialist conducted capacity assessment and developed a time-bound action plan to build capacity of MIDA and its Financial Unit. FM specialist will participate in supervision missions to proactively address FM concerns during project execution.	**H**
Inadequate cooperation of local and national government officials, resistance to institutional changes, and insufficient willingness of producers to organize.	Adequate structure for project execution, promotion measures and resources promptly available for subproject execution.	**L**
Overall Risk Rating		**M**

5. Loan conditions and covenants

There are no conditions for Loan effectiveness.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

Business Plans financed under Component Two would be determined by rural producer associations – in the context of proposed productive alliances – during project implementation and, as such, *a priori* estimation of resource allocation is not possible, nor is *ex ante* estimation of their precise cost-effectiveness or rates of return. As a proxy, a pilot exercise was conducted as part of project preparation, culminating in the development of three indicative productive alliances and their respective business plans. Economic rates of return (EIRRs) were then estimated for these business plans and serve as an indicator of the viability of future investments that would be financed under Component Two of the proposed project.

Base case EIRRs for the three pilot productive alliances were 24 percent (Achiote), 29 percent (Ñame) and 34 percent (Coffee) and are quite favorable, relative to an opportunity cost of capital in Panama of 12 percent. Rates of return are fairly robust when subjected to sensitivity analysis.

Annex 9 also summarizes, as background, secondary findings from two Bank-financed operations in Brazil and Colombia that provide support to rural productive alliances of similar scale and scope as those expected to be financed under the proposed Rural Productivity project. Both ERRs and FRRs for these two projects are satisfactory and are shown to be robust vis-à-vis sensitivity analyses.

2. Technical

In the development of the productive alliance, business plan and associated subproject, the RPAs would procure technical assistance as needed and following the positive list set forth by MIDA. As such, design quality of proposed investments would be enhanced.

The capacity of MIDA to undertake the proposed project is adequate. MIDA is a relatively decentralized institution, with ten regional offices, one each for eight of the provinces and two for Panama Province (Panama East and Panama West). The regional office in Santiago is also the seat of the Ministry's administrative headquarters, but many of the management functions are carried out also in the Panama West office (in Panama City).

3. Fiduciary

MIDA, through its Financial Unit, and DBC/ANAM, will be directly in charge of FM tasks for their respective components. These will include: (i) budget formulation and monitoring; (ii) cash flow management (including processing payments with the funds administrator, and submitting grant withdrawal applications to the Bank); (iii) maintenance of accounting records, (iv) preparation of in-year and year-end financial reports, (v) administration of underlying information systems, and (vi) arranging for execution of external audits.

The FM capacity assessment (FMA) has identified project-specific actions in order to strengthen the FM capacity of MIDA and DBC/ANAM and enable them to carry out the financial activities of the proposed project effectively. Once MIDA and DBC/ANAM carry out the proposed action plan presented in this assessment, it would have in place adequate FM arrangements that meet the Bank's minimum fiduciary requirements to manage the specific financial activities of the proposed project. Annex 7 describes in detail the FM arrangements and the FM action plan.

A Procurement Capacity Assessment of MIDA and DBC/ANAM was also conducted during project preparation. Both MIDA and DBC/ANAM have prepared a Global Procurement Plan (GPP) for the life of the project, and a detailed procurement plan for the first 18 months (PAC-18) will be finalized not later than negotiations. The PAC-18 will be updated annually.

4. Social

RPAs will generate the demand for the new project, and will determine the types of productive subprojects to be financed in the context of Business Plans in accordance with guidelines set

forth in the Project Operational Manual. Affording organized rural producers to determine investment priorities through participatory decision-making reduces clientelism and political interference. The Social Assessment for the proposed project also leverages the successful inclusive strategies deployed under previous projects implemented in Panama with similar participatory mechanisms (e.g., the Rural Poverty and Natural Resource Management Project and the PAMBC project).

A detailed social evaluation was conducted during project preparation to: (i) identify and characterize project beneficiaries; (ii) identify general needs of technical assistance and training to strengthen social and human capital of community institutions for self-management of natural resources; (iii) identify potential negative impacts associated with the proposed project activities focusing on indigenous and other vulnerable groups and design prevention and mitigation measures; (iv) prepare the Project's Indigenous Peoples Plan (IPP) to ensure that socio-cultural norms and preferences of the indigenous populations are adequately considered and respected in the project design and during its implementation; and (v) develop a participation plan to ensure the beneficiaries' involvement in design, execution and evaluation of the project.

As an outcome of the Social Assessment, a strategy to maximize inclusion in the project and access to benefits was developed and mainstreamed in project activities. The strategy consists of the following elements: (i) a communication strategy that promotes project awareness – especially among women and other traditionally marginalized groups – in the project area, in a language and medium that is culturally appropriate to the target population; (ii) mobilization and capacity-building for local organizations, through workshops and other learning instruments; (iii) activities to forge collaboration and coordination among the various stakeholders in the project area; (iv) participatory monitoring of environmental subprojects by community associations; and (v) training of trainers activities to strengthen technical service providers that work with RPAs in business planning, subproject preparation and implementation.

5. Environment

The proposed project builds on the experience and lessons learned from both the predecessor Rural Poverty and Natural Resource Management Project and the PAMBC project. This, combined with the activities under the proposed project, should have a strong overall positive environmental impact and advance global biodiversity goals by (i) strengthening management of Protected Areas and natural habitats and (ii) fostering environmentally sustainable productive activities in rural areas that encourage preservation of natural resources. Potential negative environmental impacts from productive activities and small public works are addressed through a robust identification, evaluation, and mitigation framework.

Environmental benefits will be monitored through baseline studies, impact evaluation studies, and data collection as described in Annex 3. Indicators of key environmental benefits include: (i) reduction of deforestation and increase in self-financing in Protected Areas; (ii) improvements to degraded lands and slowing of agricultural expansion in strategic areas for biodiversity conservation; (iii) increased populations of indicator species; and (iv) improved water quality in pilot watersheds. Since 1998, several key laws have been enacted that require more stringent EIA procedures for subprojects to be financed under Component 2. The project has been

designed in concert with these laws; environmental review would also ensure that productive activities and small-scale infrastructure do not have negative environmental impacts.

Enhancing rural livelihoods through sustainable productive activities. Subprojects implemented under Component 2 present the potential for both positive and negative environmental impacts. These investments are demand-driven in nature and therefore cannot be identified ex ante. A detailed matrix of the costs, timetables, responsibilities, criteria, and training needs of mitigation measures for the potential impacts of each indicative activity is contained in the project environmental management plan described in Annex 10 and will be included in the Project Operational Manual.

6. Safeguard Policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[X]	[ ]
Pest Management (OP 4.09)	[X]	[ ]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Indigenous Peoples COP/BP 4.10)	[X]	[ ]
Forests (OP/BP 4.36)	[X]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[1	[X]

7. Policy Exceptions and Readiness

There are no policy exceptions and the project is ready for implementation.

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties claims on the disputed areas*

Annex 1: Country and Sector Background

PANAMA: RURAL PRODUCTIVITY PROJECT

Panama is a nation of stark contrasts. With a population of about 3 million and per capita Gross Domestic Product (GDP) that ranks it as an upper-middle income country, Panama's extreme income inequality is such that some 40 percent of the population lives in poverty, with another one-sixth being destitute. In the backdrop of Panama City's modern skyline and comforts, slightly more than one-half of the country's rural residents fall below the poverty line, as do one-fifth of city dwellers.

National Development Strategy 2005-2009: In June 2005, the Government of Panama (GOP) put forth its five-year vision for the economic and social development of the country. The strategy seeks to reduce poverty by 20 percent by 2009 through an emphasis on fiscal responsibility, good governance and accelerated export-led growth in order to increase investment and generate employment. The five pillars of the GOP's economic and social development policy are:

i. *Reducing poverty and improving income distribution* by spurring higher, job-creating economic growth through market-based economic policies, developing human capital, and fostering productivity, especially in agriculture;

ii. *Creating employment through economic growth policy* by opening to international competition, developing export infrastructure, removing distortions and reducing transaction costs for investors, including through improved urban transport;

iii. *Reforming public finance* via more accurate and transparent budget accounting, deficit reduction, and improved expenditure management;

iv. *Developing human capital* by increasing the competitiveness of Panama's labor force while making health and education services an engine for reducing inequality; and

v. *Reforming and modernizing the State* by transforming the public sector into a facilitator of development serving Panama's citizens.

The importance of agriculture: The agricultural sector, in 2003, comprised about 7 percent of GDP; when agroindustry and related services are included, the figure rises to 22 percent. The sector also generates some 25 percent of employment in Panama. Yet the agricultural sector comprises a small and modern commercial subsector, another consisting of small and medium-scale producers with limited access to markets, and still a third comprising subsistence farmers with virtually no market access and high levels of poverty. Traditionally, the agricultural sector in Panama has looked inward, focusing mainly on supplying the domestic market, although there have been commodities traded on the international market (e.g., coffee, bananas, livestock). In the case of some commodities, this has led to technological stagnation, loss of the ability to compete internationally and, consequently, to low-level production. The relatively weak performance of the agricultural sector allows rural poverty to persist.

In recent years, Panama's "open-door" policy in response to the generalized trend towards globalization has pressured the agricultural sector to become more competitive and develop additional export commodities. Free trade agreements both intensify competition for some commodities and open new opportunities for others. In order to take advantage of these opportunities, the agricultural sector must respond with increased productivity, improved quality, stronger production and marketing links, as well as an agricultural policy framework that fosters technological transformation, more efficiency in all aspects of production and handling, and entry into foreign markets. This badly needed transformation has begun but is far from complete. Rice and pork are still subsidized; nonetheless the range of agricultural exports is increasing (e.g., melon, watermelon, pineapple). There is some indication that a wide variety of products has the potential to be exported profitably, and several are already being exported on a modest scale.

As set forth in the *2005-2009 Agricultural Strategic Plan* "Let's Get to Work" (*Manos a la Obra*), the GOP seeks to improve producers' ability to compete through increasing yields and reducing production costs, energizing employment, thereby contributing to a reduction in rural poverty. The strategy envisions a prosperous, competitive, profitable and sustainable agricultural sector that contributes to the development of the whole country, to increasing employment levels, and improving Panamanians' quality of life, especially of rural families. Specifically, the strategy aims to:

i. develop the agricultural producer and their organizations;
ii. increase production and improve competitiveness through increased yields and lower costs;
iii. promote agricultural transformation oriented toward demand and linked to agro-exports, agro-industry and technological innovation;
iv. meet the needs of the marginalized rural populace via socioeconomic programs that improve the quality of life for rural families, with emphasis on indigenous areas; and
v. promote institutional strengthening for the development of the agricultural sector.

Rural Poverty in Herrera, Los Santos and Veraguas: The Mean Monthly Income of the Working Population indicates that rural areas in Herrera, Los Santos and Veraguas are significantly below the national average: Herrera, -29 percent; Los Santos, -36 percent; and Veraguas, -52 percent. The income gap is even greater when compared with the National Average Income per Household (Table 2-3), where Herrera averages -34 percent, Los Santos, -38 percent, and Veraguas, -56 percent. In 1990, the Mean Monthly Income per Household in the whole country was US$247, but in the poorest districts it was below US$100. By 2000, the national mean stood at US$380 but in the eight poorest municipalities of the project area it remained below US$100, indicating that these municipalities had stagnated and that inequality in the country had worsened. In Veraguas, nine of eleven districts have poverty rates greater than 70 percent in 1990, with eight of these exceeding 80 percent. As of 2003 (the most recent data available), these same districts maintained these high levels of poverty. Furthermore, selected districts in Veraguas have levels of extreme poverty nearly twice the national average (Panama Poverty Maps 2005 and Panama Poverty Assessment 2006).

Agriculture is the main economic activity in these three provinces. Non-agricultural activities (industry, commerce, and services) essentially complement the farm sector. The economically

active population (EAP) or labor force in the region's farm sector is significantly higher than the national average. Whereas at the national level the primary sector includes 20 percent of the labor force, it is 28 percent in Herrera, 35 percent in Los Santos and 47 percent in Veraguas.[1] However, the sector is relatively less important in terms of creating jobs and generating income. In the three provinces, 58,000 people make up the labor force in the farm sector, which means that approximately 160,000 of the 430,000 inhabitants in the area depend directly on agriculture for their livelihoods. This does not include associated or complementary activities in goods, services, and agribusiness–that is, most of the rural economy in the area. The region has 40 percent of all agricultural lands in Panama but only employs 27 percent of the country's farm labor force. Other regions of the country create more jobs per unit of farmland, which indicates extensive land use in the area, but not higher labor productivity.

The three provinces are home to 70,000 farms with 130,000 cultivated hectares (100,000 rainfed and 30,000 under permanent crops) yet employ only 22,000 agricultural workers. There are 68,000 farmers, from small-scale and medium sized producers to peasants or farmers, who work their own or leased land; many also work for a daily wage. There is about 1 farm worker for each 5 ha of cropped fields or 50 ha of farmland. Some 13,000 farms have between 5 and 20 ha, with a total area of 133,000 ha (between crops, cattle raising, and other uses). As mentioned before, this group comprises most of the small-scale and medium-sized farmers who have potential for commercial cropping who sow only about 25 percent of their land and sell their production directly on local and regional markets, without much value-added. Agricultural productivity in the targeted provinces is modest in terms of resource potential, particularly in regard to land and labor inputs. In many cases, existing productivity across crop type is significantly lower than the level needed for financial viability.

In the last 30 years, and especially in the last decade, the provinces of Herrera, Los Santos and Veraguas, combined, have shown demographic growth rates and income levels consistently below the national average. These three provinces have a total of 26 districts,[2] cover 22 percent of Panama's territory, and contain 13 percent of its population. Taken together, population in the three provinces totals some 430,000 inhabitants (2005), most of whom live in rural areas (53 percent of total population in Herrera, 78.3 percent in Los Santos, and 71.3 percent in Veraguas). Specifically, the three provinces have the lowest population growth rate nationwide at less than one percent, largely a result of out-migration to areas of the country with more fertile soils and greater productive potential. This "push-factor" has conversely sparked a demographic shift to areas such as Darién, Bocas del Toro, the eastern part of the province of Panama, and the outskirts of Panama City.

The agricultural sector in these three provinces mainly supplies local demand, demonstrates low average yields and minimal commercial diversification, yet demonstrates a potential for producing diverse crops and participating in a range of markets (e.g., local, national, and export). A large portion of the sector has reached a stagnant balance, with low prices, low productivity, and medium-quality products, given that effective demand in the region is limited by low incomes and low growth. Modest employment opportunities in non-agricultural sectors, relative

[1] The primary sector includes fisheries and mining, besides cattle raising and forestry.
[2] A district is the geographic unit that corresponds to a municipality. In 2000 there were 25 districts in the three provinces; in 2002 a new district, Mariato, was created in Veraguas.

isolation from export markets linkages and continued protection of domestic production have all contributed to the stagnation. This situation persists due not only to the structure of small-scale farms with low productivity and low costs, but also to the deficient educational levels among poor farm families. The stagnant daily wage, an indicator of the rural labor market, can only be explained in terms of market segmentation into a subsistence group with low productivity and barriers that keep them from participating in other markets. These barriers are related to both physical conditions (extremely difficult local travel) and human capital. Therefore, what is required is a strategy to support: (i) creating jobs at least at the minimum wage level; (ii) the profitability of other factors that poor farmers can exploit, such as their human capital and their working capital; and (iii) training and accumulating working capital for small farmers.

Boosting Agricultural Productivity: Average crop yields for the three provinces, when compared with average yields needed for profitability, are below the profitable level, implying a need to raise farm yields significantly upgrade current technologies to become financially viable. These low-yield farms are able to survive because their production costs are also low, due to their reduced use of chemical and other inputs needed to produce adequate yields of a quality acceptable in high-growth markets. Part of the proposed strategy for the agricultural sector assumes that increased rural land productivity will, in turn, increase agricultural production, income, and employment rates, and consequently decrease out-migration to other provinces.

Agricultural Policy: A recent study (Peña and Gurría 2006) suggests that agricultural policies must be aligned with the commercial environment that may arise following the implementation of the proposed United States-Panama Free Trade Agreement, especially those policies designed to improve farmers' productivity and ability to compete. Current support programs – mainly price supports – make products less competitive. Reaching the highest levels of productivity, competition, diversification, and value-added is essential to successfully meet the challenge of participating in free trade and, at the same time, raise farmers' real income. There are economic policy instruments, especially credit and financial support policies, which do not reach the small-scale producer but which, if they were better implemented, could have a significant impact on making production more viable and generating jobs and income in low productivity areas. Some of these instruments are:

- **The Agricultural Transformation Law (Law No. 25 of 4 June 2001).** A fund of US$30 million for agricultural transformation, managed by MIDA, provides soft loans (at 5 percent interest) to farmers, along with direct financial assistance as a partial but direct contribution of non-reimbursable funds. The proposed project would not directly compete with the reimbursement mechanism under *Ley 25*, since most producers targeted under PRORURAL would have insufficient capital to undertake investments and would not have ready access to external capital from financial institutions.

- **Special Fund for Contingency Credits (Law No. 24 of 4 June 2001).** The Federal Government, through Law 24 of 2001, established the Special Fund for Contingency Credits (FECC), with the purpose of giving loan assistance to farmers who face natural and economic disasters that impact primary sector activities; the loans will be approved by a Commission chaired by MIDA. Resources assigned to the FECC are administered by BDA under the terms of Law 24 of 2001 and Executive Decree No. 139 of 20 June 2001, which

regulate the granting of loans from the Fund. FECC's potential beneficiaries are all individual producers, legal persons, and cooperatives approved through a resolution of the FECC Commission that determines the amount to be granted to each. These loans are given without taking into account other credit obligations farmers may have to state entities.

- **Special Interest Compensation Fund (FECI)**. Loans from the national banking system have targeted commercial, housing, and consumption activities, located mainly in the Panama and Colón transit zones, to the detriment of the agricultural sector. This is the result of structural factors in Panama's economy that make it easy for the secondary and tertiary sectors in urban areas to have access to financial resources, because they have collateral and engage in activities that are more profitable and less risky. This is in contrast to the primary sector, characterized by being highly segmented into farms (small-scale) that produce higher risk crops and have little collateral security to offer. To compensate for this situation, the Federal Government, through Law 20 of 1980, established a system of preferential interest rates for the agricultural sector, to foster investment in farming activities through a discount on the interest rate on loans to the sector. This will contribute to the transfer of resources from commercial, service, and consumption activities to the primary sector of the economy.

- ***Law 58 (29 December 1999) by which the Forest Incentive Certificate for small-scale producers was created and Article 2 of Law 20 of 1995 was modified.*** The application of this incentive could have very significant impact on two areas crucial to the rural poor: income generation and sustainable use of areas not suited to agriculture. However, four years after its approval, MIDA and ANAM have yet to implement this law because the Executive and the Assembly have not been able to agree on the allocation of funds, which originally were supposed to come from income generated by the Fiduciary Fund.

It is evident that these policies and incentives could favor the small farmer. However, small farmers must learn how to effectively access these benefits, and the efficiency and transparency with which such incentives are implemented by the Government must improve. Similarly, greater efficiency is required to implement policies, especially those having to do with budgetary allocations to finance such incentives, and with regulating and managing them in an appropriate and timely fashion.

Underlying the Government's agriculture and rural strategies are the following principles that form the foundation for the proposed project:

> **Productivity and profitability:** Achieving permanent improvements in rural income and well-being will require increased productivity for both agricultural and non-agricultural activities. Rural producers must adopt instruments and methods to more efficiently use available resources, thereby ensuring the profitability and competitiveness of their production. As noted in the Panama Public Expenditure Review (PER): Rural Development and Agriculture (2006), there appears to be little systematic targeting according to the GOP's poverty reduction objectives or according to considerations of comparative advantage. As such, the agricultural sector faces significant challenges from trading partners and needs to improve productivity and modify the composition of its basket of products in order to realize its comparative advantage.

The PER also reports on indicators of the competitiveness of Panamanian agricultural products (i.e., nominal protection rates) which were recently calculated by the Institute for Agricultural Marketing (IMA). In general, the sector has difficulty competing in international markets. The least competitive products appear to be onions, raw sugar, potatoes, and milk. While calculation of domestic resource cost coefficients (DRCs) would yield more information as to comparative advantage, this preliminary work nonetheless indicates that there is significant protection in the sector and therefore many products are unlikely to be competitive. In light of the ongoing free trade agreement negotiations with the United States, raising agricultural productivity in order to improve the sector's competitiveness is imperative.

Associations: The small farmer, acting alone, is unlikely to effectively compete in a market dominated by intermediaries with asymmetric bargaining power and information. Conversely, participation in a production chain can provide stable, reliable and more remunerative market access. The project will promote small farmer participation in associations, and seek to incorporate them into *productive alliances,* thereby improving market access. A *productive alliance* is the main mode or mechanism through which producers with potential can participate in production chains that will help them improve their productivity by giving them better and more equitable access to markets, technologies, and organizations. A *business plan* is the instrument upon which an alliance would be evaluated and supported.

Demand: The project must respond to demand; there must be a market for the activities to be funded, which would be satisfied by the respective productive alliance.

Business management: A transformation of traditional, low-productivity agriculture is needed into more modern, commercial agriculture that creates jobs and growth potential. A culture of formally-established businesses with contractual obligations will be fostered, within which producers with potential will assume business responsibilities. Within this context, the business plan is a crucial instrument.

Shared risk: At present the small-scale producer assumes the typical risks of farming, as well as the risk of not selling his product, or selling it without recovering costs. Productive alliances provide a way for the different components of a productive chain (e.g., rural producers, agribusinesses, marketing firms, other service providers) to share the production risks, especially in agriculture.

Equity: The project targets small farmers with production potential and, therefore, with potential for creating jobs. Equity among partners in the producer chains will be promoted through alliances, so that organized producers can more effectively negotiate a more equitable share of the profits. This will help to decrease the conditions of inequality within Panama's economy. Gini coefficients confirm the deep and growing income gap between urban and rural Panama; as such, the proposed interventions under PRORURAL would seek to contribute to closing this gap, while building on best-practice experiences throughout the region.

Natural resource sustainability and biodiversity conservation: The project – primarily through a partially-blended project funded by the Global Environmental Facility (GEF) – will actively promote biodiversity conservation and natural resource sustainability, with significant overall impact, through cooperating in the implementation of plans for handling protected areas and special management areas established by the National Protected Areas System (NPAS). Mechanisms for paying for environmental services (PES) will be promoted to strengthen the links between markets and the sustainable exploitation and conservation of natural resources.

The proposed IBRD operation, together with the partially-blended GEF operation, specifically address key threats facing Panama and its natural resource base by reducing: (i) **push factors**, such as natural resource depletion, deforestation, rural poverty, which spur human migration to the areas of global conservation importance within the Panamanian Mesoamerican Biological Corridor (MBC-P) and (ii) **pull factors** (e.g., over-exploitation, illegal harvesting, lax enforcement regime) by consolidating and strengthening the implementation of existing management plans to ensure the conservation of globally significant biodiversity. Greater decentralized management of NPAS would be directly fostered, as would more effective implementation of existing management plans in selected protected areas of the NPAS, in line with the objectives of Panama's primary environmental legislation (*Ley 41*).

Both the proposed project and the partially-blended GEF operation deploy a demand-driven mechanism in order to leverage local communities in addressing these factors. Rural producer associations, under the proposed IBRD operation, would implement small-scale investments to increase their market orientation and value-added, in an effort to reduce the push factors that advance the agricultural frontier, especially in the Pacific region. Investments in frontier communities and the adoption of more environmentally compatible and sustainable land uses would also stabilize the agricultural frontier and reduce pressures on sites of key environmental importance. The GEF operation finances small-scale environmental subprojects proposed and implemented by community associations to conserve biodiversity of global significance and, combined with a greater role in the co-management of protected areas, would contribute to reducing the pull factors that have led to natural resource depletion and degradation in protected areas of Panama.

Annex 2: Major Related Projects Financed by the Bank and other Agencies

PANAMA: RURAL PRODUCTIVITY PROJECT

Sector Issue	Project	Latest Supervision (ISR) Ratings (Bank-financed projects only)	
Bank-financed		**Progress (IP)**	**Objective (DO)**
Rural Poverty	Rural Poverty and Natural Resources (7847-PA)	S	S
Biodiversity Conservation; Environmental Mgt	Panama Atlantic Mesoamerican Biological Corridor (PA-GE-45937)	S	S
Land Administration	Land Administration-PRONAT (7045- PA)	MS	MS
Social Protection	Social Investment Fund (7837-PA)	S	S
Health, water supply and sanitation	Rural Health (3841-PA)	S	S
Education	Education (3994-PA)	S	S
Other development agencies			
IDB	National Environmental Program (PAN) (ongoing), Agricultural Services Modernization Program (ongoing), Panama Canal Sustainable Development Strategy (completed), Darien Sustainable Development Program (ongoing), Bocas del Toro Sustainable Development (ongoing), PRORURAL (preparation), Urban Municipalities (preparation)		
IFAD	Triple C: Sustainable Rural Development Project in the Provinces of Coclè , Colon, and Panama West (ongoing)		
UNDP	Darien GEF Biodiversity Project		
JICA	PROCAPPA: Panama Canal Watershed Conservation Project (ongoing)		
USAID	Developing plans for water quality in selected sub-watersheds within PCW; Natural Resource Management in the Canal Watershed; and Protected Area Management in Charges, Soberania and San Lorenzo National Parks.		
IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)			

Annex 3: Results Framework and Monitoring

PANAMA: RURAL PRODUCTIVITY PROJECT

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information
The **Project Development Objective** of PRORURAL is to contribute to increased productivity among organized rural small-scale producers and through their participation in productive alliances, while ensuring the sustainable use of natural resources and the conservation of globally important biodiversity.	By EOP, at least a 25% increase in sales receipts of small-scale producers via PRORURAL-financed productive alliances; By EOP, at least 40% increase in net revenues for the participating RPAs via the productive alliance. By EOP, at least a 20% increase in membership in RPAs for the project area, relative to baseline; and By EOP, 10% reduction in area under annual crops and cattle in project area on land appropriate for forestry uses.	Y1-Y5, information on each of these indicators will be collected to assess whether project inputs are achieving the intended impact, with adjustments made where appropriate.
The **Project Global Environmental Objective** is to conserve biodiversity of global importance and protect important forest, mountain and marine-coastal ecosystems in Panama.	(This objective and its indicators are detailed and monitored under the associated partially-blended GEF operation).	
Intermediate Outcomes	**Intermediate Outcome Indicators**	**Use of Intermediate Outcome Monitoring**
Component 1: Support to Productive Alliances	By EOP, 140 RPAs trained and capable of participating in productive alliances. By EOP, at least 30 technical service providers trained and certified to provide technical assistance to RPAs and productive alliances. At least 100 productive alliances proposed with quality Business Plans according to criteria set forth in Project Operational Manual. By EOP, at least 70 Business Plans approved for financing.	Y1-Y5, semi-annual project reports would disseminate progress on outcome indicators and would provide inputs to Bank supervision missions to assess planned versus actual accomplishments and pace of execution. Adjustments will be made to POAs when needed and justified.

Component 2: Productive Alliances	60 subprojects under implementation. 5,000 small-scale producers participating in PRORURAL-financed productive alliances. 85% satisfaction among RPAs regarding technical assistance from certified service providers. By EOP, 10% increase in land under perennial crops (previously under annual cropping or pasture) by organized producers in project area.	Y1-Y5, semi-annual project reports would disseminate progress on outcome indicators and would provide inputs to Bank supervision missions to assess planned versus actual accomplishments and pace of execution. Adjustments will be made to POAs when needed and justified.
Component 3: Environmental Investments and Strengthening of NPAS	By EOP, at least 50,000 ha of forests and other natural ecosystems of global biodiversity significance in the buffer zones of Protected Areas and biological corridors connecting them in the MBC-P under effective conservation (protection and sustainable management). By EOP, biodiversity of global significance is under effective conservation, as measured by vegetation cover and indicator species of conservation interest. By EOP, 60% of districts in the project area have incorporated biodiversity aspects into sector policies and plans and adapted appropriate regulations and implement plans accordingly.	Y1-Y5, semi-annual project reports would disseminate progress on outcome indicators and would provide inputs to Bank supervision missions to assess planned versus actual accomplishments and pace of execution. Adjustments will be made to POAs when needed and justified.
Component 4: Project Management, Monitoring and Evaluation	Annual Operating Plans successfully executed Satisfactory technical and financial audits of the Project. The M&E system reports satisfactory results for the financed Business Plans. Quarterly reports completed and sent to Bank.	Y1-Y5, semi-annual project reports would disseminate progress on outcome indicators and would provide inputs to Bank supervision missions to assess planned versus actual accomplishments and pace of execution. Adjustments will be made to POAs when needed and justified.

Arrangements for results monitoring

Project implementation will be guided by a Results Framework. MIDA will have overall responsibility for the Monitoring and Evaluation of project activities and manage data inputs from the proposed rural productive alliances. MIDA and DBC/ANAM would maintain a simple financial system to compile project financial statements, using a computerized financial management system. The system would have the ability to classify financial information by project component, categories of disbursement and sources of financing; and produce useful financial reports (such as interim financial reports-IFRs and Statements of Expenditures -SOEs).

The Monitoring and Evaluation (M&E) process will function as both a mechanism for assessing project impacts and a day-to-day management tool. The M&E system will also support the project supervision process by ensuring that baseline and follow-up data for the key performance indicators are collected and made available on an ongoing basis and at strategic times including project start-up (underway before project effectiveness), mid-term review and project closing.

Monitoring of Fiduciary Arrangements: During preparation, Bank specialists assessed the financial management and procurement capacity of MIDA and DBC/ANAM and found them to be adequate. An Action Plan was agreed with MIDA for required improvements (see Annex 7). MIDA will submit quarterly financial management and procurement reports to the Bank. Monitoring and processing of procurement of services, goods, works and subprojects would be carried out by the MIDA staff. The annual planning processes would be monitored with specific indicators on planning performance defined in the Results Framework. The physical implementation of the project would be monitored based on the specific outputs and monitoring indicators for the project components as defined in the Results Framework. Information from the monitoring system would be analyzed by project management and disseminated according to the project's communication strategy to appropriate stakeholders. The project would provide project progress reports quarterly and an update on legal covenants compliance every six months to the Bank.

Project Evaluation

Methodology: Evaluation of project outcomes would seek to measure (both quantitatively and qualitatively) changes in both income and employment among small-scale producers participating in PRORURAL. Evaluation design would attempt to capture both *before-after* and *with-without* project outcomes through the application of a quasi-experimental approach. Quasi-experimental (i.e., nonrandom) methods are indicated when it is not possible to construct randomized treatment and comparison groups. These techniques generate comparison groups that resemble the treatment group, at least in observed characteristics, through econometric methodologies, which include matching methods, double difference methods, instrumental variables methods, and reflexive comparisons. The main benefit of quasi-experimental evaluation design is that it draws on existing data sources (e.g., LSMS and other similar databases) and can be performed after a program has been implemented, given sufficient existing data. The statistical complexity of quasi-experimental approaches requires considerable expertise in evaluation design and in analysis and interpretation of the results. Furthermore, selection bias (i.e., differences among subsets of the targeted population due to unobservables) is a known weakness of the quasi-experimental approach, yet statistical techniques such as matching and

instrumental variables can control for such bias. Detailed terms of reference for the evaluation of project outcomes were agreed with MIDA at appraisal.

The following would also complement the quasi-experimental approach described above:

Semiannual and Annual Evaluation: Annual beneficiary evaluations, along with quarterly project reporting, will allow semiannual supervision missions to assess the status of obtaining key project outcomes. During these missions, learning workshops for both MIDA and Bank project staff – would identify and discuss lessons learned during project implementation with project stakeholders and beneficiaries.

Mid-term evaluation. The Bank's supervision team, together with a team of external reviewers, will conduct a mid-term evaluation of the project execution. It will be conducted no later than two years after the first disbursement. The external review will focus on: (i) assessing the degree of advancement in achieving project outcomes; (ii) assessing of the institutional arrangements for project implementation; (iii) reviewing and updating the project operational manual; and (iv) reviewing the POA.

Final Evaluation. A final evaluation will be conducted in the last semester of project execution. The key objectives of the final evaluation will be to: (i) assess the degree of compliance with the expected project results and (ii) use the results in designing a strategy for replication in a future project.

Arrangements for results monitoring

		Target Values					Data Collection and Reporting		
Project Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
By EOP, at least a 25% increase in sales receipts of small-scale producers via PRORURAL-financed productive alliances.	Pre-project sales receipts of RPAs	-	-	10%	-	25%	Semi-annual	Beneficiary surveys Business Plan Proposals Project MIS	MIDA
By EOP, at least a 20% increase in membership in RPAs for the project area, relative to baseline.	Pre-project RPA membership in project area	-	-	10%	-	20%	Semi-annual	Beneficiary surveys Business Plan Proposals Project MIS	MIDA
By EOP, at least 40% increase in net revenues for the participating RPAs via the productive alliance.	Pre-project net revenues of RPAs			20%		40%	Semi-annual	Business Plan Proposals Project MIS	MIDA
By EOP, 10% reduction in area under annual crops and cattle in project area on land appropriate for forestry uses.	Pre-project land use inventory	-	-	5%	-	10%	Semi-annual	Beneficiary surveys Land-use inventories Project MIS	MIDA
Intermediate Outcome Indicators									
By EOP, 140 RPAs trained and capable of participating in productive alliances.	-	12	23	58	47	-	Semi-annual	Business Plan Proposals Project MIS	MIDA
By EOP, at least 30 technical service providers trained and certified to provide technical assistance to RPAs and productive alliances	-	15	15	-	-	-	Semi-annual	Business Plan Proposals Project MIS	MIDA

At least 100 proposals for productive alliances from RPAs to be financed under PRORURAL		8	17	42	33		Semi-annual	Business Plan Proposals Project MIS	MIDA
At least 60 productive alliances approved for financing.	0	5	10	25	20	-	Semi-annual	Business Plan Proposals Project MIS	MIDA
60 subprojects under implementation.	0	5	10	25	20	-	Semi-annual	Project MIS	MIDA
5,000 small-scale producers participating in PRORURAL-financed productive alliances.	0	420	850	2,130	1,600		Semi-annual	Project MIS	MIDA
By EOP, 85% overall satisfaction among RPAs regarding technical assistance from certified service providers.	-	60%	-	70%	-	85%	Semi-annual	Beneficiary Surveys Project MIS	MIDA
By EOP, 10% increase in land under perennial crops (previously under annual cropping or pasture) by RPAs in project area.	Pre-project land area under perennial crops	-	-	5%	-	10%	Annual	Beneficiary surveys Land-use surveys Project MIS	MIDA
Annual Operating Plans successfully executed	-	1	1	1	1	1	Annual	POAs	MIDA
Satisfactory annual Project (i) technical audits; (ii) financial audits.	1 1	1 1	1 1	1 1	1 1	1 1	Annual	Technical audits Financial audits Project MIS	MIDA External Consultants

Annex 4: Detailed Project Description

PANAMA: RURAL PRODUCTIVITY PROJECT

The **Project Development Objective of PRORURAL** is to contribute to increased productivity among organized rural small-scale producers and through their participation in productive alliances, while ensuring the sustainable use of natural resources and the conservation of globally important biodiversity. **Key results indicators** include: (i) by EOP, at least a 25 percent increase in sales receipts of small-scale producers via PRORURAL-financed productive alliances; (ii) by EOP, at least 40 percent increase in net revenues for the participating RPAs via the productive alliance; (iii) by EOP, at least a 20 percent increase in membership in RPAs for the project area, relative to baseline; and (iv) by EOP, 10 percent reduction in area under annual crops and cattle in project area on land appropriate for forestry uses.

The **Project Global Environmental Objective** is to conserve biodiversity of global importance and protect important forest, mountain and marine-coastal ecosystems in Panama. Global Environmental Outcome Indicators include: (i) by EOP, local and national institutional capacity is improved, as measured by the WWF/Bank Management Effectiveness (GEF BD SP 1) Tracking Tool to manage 14 protected areas (675,775 ha); (ii) by EOP, at least 50,000 ha of forests and other natural ecosystems of global biodiversity significance in the buffer zones of Protected Areas and biological corridors connecting them in the MBC-P under effective conservation (protection and sustainable management); (iii) by EOP, biodiversity of global significance is under effective conservation, as measured by vegetation cover and indicator species of conservation interest; and (iv) by EOP, 60 percent of districts in the project area have incorporated biodiversity aspects into sector policies and plans and adapted appropriate regulations and implement plans accordingly.

Project Components

Component 1 – Support for Productive Alliances (US$7.6 million) – would finance preparatory activities that contribute to the presentation of viable business plans for proposed productive alliances. Such activities include:

> **Information, dissemination, and promotion.** These activities are the continuation and implementation of the project's communications strategy; their purpose is to keep the public informed of services offered by PRORURAL, its advances and achievements, as well as to provide, in coordination with other MIDA systems, relevant technical information on markets, prices, and opportunities open to alliances that are already operating, being formed, or are in the planning stage.
>
> **Training.** Training is aimed at facilitating small-scale producers' participation in markets and production chains through activities aimed at sharing knowledge and agronomic practices, and information and technical assistance to develop abilities that would allow them to actively contribute to alliances and exploit alliance benefits. This subcomponent will fund workshops, meetings, assistantships, courses, and access to information and technical assistance to foster a greater business and market orientation in small rural

producers; public awareness activities, mobilization and recruitment of small producer organizations; and instructor recruitment and training.

Training events are organized across the following categories: (i) training for potential, non-organized producers; (ii) training for RPAs; (iii) training for technical supervisors[1] and technical assistance service providers; and (iv) training for members of alliances already in operation, including support activities not included in their business plans.

Preparing a business plan. PRORURAL would support the preparation of business plans by hiring specialists to help alliance members under MIDA supervision. The Project Operational Manual would provide guidance on the content, requirements, preparation and submission of business plans to be funded. As part of preliminary studies, reference technical reports have been written to facilitate business plan preparation.

Studies. This activity would finance studies aimed at identifying and strengthening production chains, studies on markets, soils, and zoning, and studies to establish Environmental Services Payment schemes within the framework being developed by ANAM, among others. Some of these studies will be implemented or coordinated by sector institutions, as will studies linked to business plans.

Component 2 – Productive Alliances (US$24.7 million) – would finance approximately one hundred subprojects (up to a maximum of US$500,000 each), implemented by RPAs in the targeted provinces of Herrera, Los Santos and Veraguas. Subprojects would be financed in the context of business plans for productive alliances between RPAs and at least one agroprocessor, wholesaler or other commercial partner. Subprojects would include: fixed capital (e.g., plant and equipment, minor infrastructure), working capital and technical assistance. Subproject finance – limited to the first two years of the approved business plan – would be guided by procedures outlined in the Project Operational Manual. The proposed project would expect to reach some 5,000 small-scale producers (i.e., farm holdings of 0.5 to 20 hectares) or about 13 percent of total small-scale producers in these three provinces.

Eligible activities in a business plan include: crop establishment and renewal; extension services, specific training, land preparation, initial crop maintenance, harvest costs for small producers who cannot afford hired labor; on-farm post-harvest processing, some processing and marketing costs needed to launch the alliance, intangibles (certificates, business plan processing, insurance, and strengthening of small producer organizations), as well as some market access activities. All activities to be funded must be defined in the business plan.[2] Also included are activities relating to business plans for non-agricultural rural alliances, such as fishing, arts and crafts, ecotourism, and others.

Project funds and counterpart contributions from RPAs would finance the following activities of the business plan: (i) Technical assistance services, organizational, business, and commercial

[1] This includes technicians in MIDA who will promote business plans.

[2] This should take into account the need to finance the negative cash flow of small-scale farmers until they receive income from their first harvest.

support; (ii) Intangible assets, e.g., the costs of doing business; (iii) Market access costs associated with new market penetration; (iv) fixed investment; and (v) working capital. Subproject agreements would formalize the use of grants made from the proceeds of the Bank loan and would be signed between the RPA and MIDA.

Project Area: The provinces of Herrera, Los Santos, and Veraguas are targeted under the proposed project. These three provinces have a total of 26 districts, cover 22 percent of Panama's territory, and contain 13 percent of the population. All together the population of the three provinces totals over 430,000 inhabitants (2005 estimate), most of whom live in rural areas (53 percent of total population in Herrera, 78 percent in Los Santos, and 71 percent in Veraguas). The project area was selected based on its production potential and characteristics, and because the other provinces of Panama already have special regional development programs that fulfill their requirements and priorities, for example: the Darién, Bocas del Toro, and Chiriquí programs funded by IDB; a project known as Triple C (Coclé, Colón, Capira) and another in the Ngöbe-Buglè district, both funded by FIDA.

Eligibility criteria: To be eligible to access finance under Component 2, a producer must fulfill the following requirements:[3]

i. Be a member of an eligible producer organization or association (i.e., RPA). If not a member, he/she may benefit from the project's training component and then become a member of an eligible organization;
ii. Have as a main occupation the activity of the alliance requesting funding;
iii. Have access to land suitable for agriculture (owned, leased, or under certified possession);
iv. Have an intermittent market relationship to sell his/her surplus production; and
v. Have no more than 10 hectares of land under different traditional crops.

To be eligible, a Rural Producer Association (RPA) must:

i. Be a legally-constituted entity;
ii. Have administrative capacity and financial means to administer a subproject;
iii. Cover part of the cost of participating in a business plan, in either labor, land, or cash;
iv. Exercise open membership for producers who fulfill the RPA's requirements, although their participation in an alliance will be subject to specific conditions derived from the respective business plan (e.g., contributions, commitments, contracts);
v. Form an alliance with other links in the production, processing, and marketing chain. Several producer organizations may participate in an alliance or business plan; and
vi. Have a business plan that has been developed according to the criteria and requirements of Project Operational Manual.

The business plan must be financially viable and profitable for the alliance and its members. Private companies (processing plants, agribusinesses, and marketing firms) belonging to an

[3] These criteria are for agricultural alliances; the Project Operational Manual also defines criteria for non-agricultural alliances.

alliance must demonstrate good financial standing. The subproject to be financed under Component 2 would have a ceiling of US$500,000 (between investments and working capital for the first two years) to pay for the part of the business plan that covers end-beneficiaries or producers in the target population.

Business plans will be evaluated by MIDA to determine whether they should be funded, based on the following selection criteria:

i. Demonstrate there is a viable, accessible market for alliance products;[4]
ii. Show the technical viability of the business plan;
iii. *Profitability:* the business plan should show that the alliance is economically profitable in its components (organizations and businesses) and as a whole within a period of ten years, at the appropriate discount rate, and that its cash flow allows it to fund small-scale producers' short-term requirements;
iv. *Funding:* Through the organization and other members of the alliance, producers must show they have sufficient funds to cover non-eligible activities and the working capital they will require after the second year, when project funding may be restricted;
v. Once the above criteria have been met, priority will be given to business plans that offer the greatest contributions by organizations to fund primary producers and the greatest contributions by businesses (alliance members) to finance the plan; and
vi. MIDA will approve business plans for funding based on the foregoing criteria, by evaluating business plans submitted in response to at least two annual calls for plans, and taking into account the project's relevant budget allocation and financial programming.

Component 3 – Environmental Investments and Strengthening of NPAS (US$11.4 million) – would finance small-scale investments in natural resource management and productive opportunities, proposed and implemented by community and producer associations in the fourteen protected areas and associated buffer zones targeted under the partially-blended PAMBC project.

The component is divided in two subcomponents:

Environmental Subprojects, administered by DBC/ANAM, would provide matching grants to eligible community associations in support of subproject investments for improved natural resource and environmental management in already designated Protected Areas and buffer zones, as well as income-generation from environmental goods that would be generated from the environmental assets in these areas. The matching grants would be demand-driven and support the costs of needed investments in small-scale infrastructure, technical assistance and other goods, works and services.

Each subproject gets screened for its contribution to the project's overall objective of conservation of globally significant biodiversity, consistent with three indicative categories described below, proximity to the 14 selected protected areas, consistency with

[4] Based on existing contracts or contracts to be signed with RPAs.

the agreed Protected Area Management plans, technical quality of the proposal, commitment to provide matching funds, consistency with the economic, social and environmental guidelines established in the Project Operational Manual, capacity for implementation, among other criteria.

The project will include a list of excluded activities that are ineligible for funding under the project including but not limited to:[5]

i. practices or activities which promote resource degradation or contamination (including deforestation or other conversion or degradation of natural habitats (including wetlands), conversion of shade-grown to open-sun coffee, introduction of non-native aquaculture species into new watersheds (where they are not already established), or the introduction of non-native animals to islands);
ii. projects requiring involuntary resettlement;
iii. subprojects whose results are to create conditions which further marginalize or overburden any component of a family or social group, in particularly, women;
iv. payment of taxes (direct or indirect);
v. rental or purchase of lands, titling or fencing;
vi. payment of debts, dividends or for capital recovery;
vii. purchase of stocks, bonds or other investment instruments; and
viii. religious or political activities of any kind.

Eligible investments would be comprised of three indicative categories:

i. environmentally- oriented agribusiness to add value to primary production;
ii. management of natural resources for alternative products in response to emerging ecomarkets (e.g. non-timber forest products (NTFP), ecotourism, handicrafts, captive breeding, environmental services); and
iii. investments to restore and maintain environmental assets (e.g., reforestation, agroforestry, soil conservation).

Examples of potential subprojects include:

i. Sustainable livestock raising and silvopastoral systems (in buffer zones);
ii. Farm diversification to add value to primary production;
iii. Sustainable production, cultivation and marketing of Non-timber forest products such as medicinal plants;
iv. Support to production and marketing of handicrafts;
v. Support to initiatives for marketing of environmental services;
vi. Production of sustainable and renewable energy sources
vii. Restoration of degraded areas and small watersheds;
viii. Community ecotourism;
ix. Reforestation and agroforestry; and
x. Establishment of forest farms with native species

[5] Applicable to subproject proposals under Component 2 and 3.

xi. Development of ecological products and initiatives for socio-environmental certification;

Subproject grants would typically range from US$10,000 to US$30,000 for which beneficiaries would contribute at least 10 percent of total subproject cost (in cash or in-kind).

Subproject funds would be transferred directly to producer and community associations, under contract agreements signed with DBC/ANAM. The community associations would then be responsible for procurement, financial management, overall subproject execution and subsequent expense reporting to DBC/ANAM following subproject completion.

The Project Operational Manual would provide detailed guidance on eligibility for subproject financing; obligations and responsibilities of associations, ANAM and other stakeholders in implementation of the component; and flow of funds and financial reporting regarding the matching grants. The Manual would also include a detailed screening process to evaluate and prevent possible negative impacts of subprojects to the local environment.

Support for Natural Resources Management would foster and support the principles, processes and activities to promote conservation, protection, restoration, and sustainable use of natural resources and biodiversity. The most successful subprojects under the PAMBC were those carried out by the communities with greater management capacity, organization, and a commitment to results, and which implemented activities compatible with the restrictions on natural resource use particular to their specific situation. Experience also showed that, in order to improve living conditions for the poor, the proposed project should bolster its assistance through greater integration of other factors such as development of rural enterprises and market mechanisms. Therefore, to give rural populations the ability over the long term to reduce poverty through income-generating activities compatible with appropriate natural resources management, the subcomponent would include technical assistance for the following:

- ***Improve the technical knowledge of local community and producer groups.*** Twenty-six workshops will be held with about 1,000 members of 100 organizations to evaluate and select those to be strengthened. Training activities and themes will be selected, and groups and organizations trained in technical areas such as alternative production methods, natural resources management, subproject administration and accounting, and marketing. On-demand technical assistance will be provided on a follow-up basis to meet specific needs as identified by community associations. Special attention will be given to support initiatives for the formalization of community and producer organizations (e.g., gaining legal status). Local project promoters will be trained to quickly disseminate information about the project and act as liaisons to local communities.

- ***Development of agribusinesses and NRM initiatives.*** The rural economy of Panama, particularly in the MBC-P, requires an improved agribusiness structure to provide the inputs, services, post-harvest processing, markets, and distribution that constitute the entire production chain. To ensure that productive activities are sustainable, environmentally beneficial, have greater income-generating potential, and avoid bottlenecks, the project will fund activities to identify and select productive initiatives and the groups to develop them, train those groups and individuals, and help identify, prepare, and implement business plans for pilot projects in NRM and agribusiness.

- ***Subproject support.*** These activities will help local groups and organizations identify, prioritize, select, prepare, implement, and supervise environmental subprojects financed under subcomponent 1A. Experience from the PAMBC project makes clear that investment in this kind of technical assistance yields much more relevant, successful, and sustainable subprojects.

- ***Markets and commercialization.*** Special attention will be given to helping commercialize products and create markets by analyzing the products and services most appropriate for market development, identifying organizations, networks, or groups interested and capable of creating markets and providing marketing services, defining marketing strategies, and helping put those strategies in practice. Some strong candidates for further commercialization have been identified: cacao, plantain, ecotourism, artisanal crafts, organic agricultural products including roots and tubers, and non-timber forest products.

Key outcomes of this component include approximately 450 environmentally-oriented agribusiness, NRM, and biodiversity conservation subprojects completed, emphasizing conservation and recovery of habitats for biodiversity.

Component 4 – Project Management, Monitoring and Evaluation (US$3.2 million) – would include incremental operational costs of MIDA in the execution of PRORURAL, including goods and services required for the establishment of a monitoring and evaluation system.

Annex 5: Project Costs

PANAMA: RURAL PRODUCTIVITY PROJECT

Project Cost By Component	Local US $million	Foreign US $million	Total US $million
1. Support to Productive Alliances	6.2	0.7	6.9
2. Productive Alliances	24.0	0.0	24.0
3. Environmental Investments and support to the NPAS	10.5	0.0	10.5
4. Project Management, Monitoring and Evaluation	2.5	0.4	2.9
Total Baseline Cost	**43.2**	**1.1**	**44.3**
Physical Contingencies	1.2	0.0	1.2
Price Contingencies	1.3	0.1	1.4
Total Project Costs[1]	**45.7**	**1.2**	**46.9**

[1] Identifiable taxes and duties are US$0.7 m, and the total project cost, net of taxes is US$46.2 m. Therefore, the share of project cost net of taxes is 98.5%.

Annex 6: Implementation Arrangements

PANAMA: RURAL PRODUCTIVITY PROJECT

Executing Entities:

Productive Alliances: are composed of a RPA and at least one commercial partner (e.g., wholesaler, agroindustry, processors). The productive alliance would jointly identify a mutually beneficial market opportunity, detailed in the form of a *business plan*, which would also include a feasibility assessment. Once approved, that portion of the business plan executed by the RPA and financed with proceeds from the proposed project (i.e., the subproject) would be formalized through a subproject agreement, signed by the RPA and MIDA (see below). Implementation of the business plan would be the responsibility of all partners in the Alliance. The RPA would be responsible for subproject execution. Arrangements for the formalization of the productive alliance would be detailed in the Project Operational Manual and would be a prerequisite for subsequent subproject financing under the proposed Business Plan.

Rural Producer Associations (RPAs): are rural citizens who have organized into legally-constituted civil associations for the common interest of improving their productivity, competitiveness and market orientation. In the context of a productive alliance with wholesalers, processors and agroindustry, RPAs identify, prepare and implement their business plan and associated subproject, assisted by technical specialists whom they contract directly. Potential RPAs would include both agricultural and non-agricultural producers, organized in associations, cooperatives, unions or any other form of representative organization of civil society, with legal standing (or in the process of obtaining it). RPAs would contribute a minimum of ten percent (in cash or in-kind) toward the total cost of subproject implementation.

Ministry of Agricultural Development (MIDA): executes the project and sets forth the norms and guidelines for the participation of RPAs and wholesalers, processors and agroindustry in the Project Operational Manual. MIDA has a regional staff in the project area and would accompany and promote the execution of investments in support of proposed productive alliances.

Subproject Cycle: Productive Alliances

- Following a promotion and dissemination campaign in the project area, RPAs present proposals (*perfiles*) for productive alliances to MIDA, following standard formats included in the Project Operational Manual;

- RPAs, in concert with the other parties of the proposed productive alliance and contracting technical service providers as needed, would further develop approved *perfiles* into Business Plans, including subproject proposals, and submit them to the MIDA for review;

- MIDA evaluates the Business Plan for the proposed productive alliance and associated subproject for their technical, financial, institutional, social and environmental feasibility and recommends approval;

- For that portion of the Business Plan to be executed by the RPA, a subproject agreement is signed between the RPA and MIDA outlining the use of project resources, and the rights and responsibilities of the RPA;

- MIDA transfers resources to the RPA for subproject execution according to the Business Plan;

- RPAs contract goods, works and services, in accordance with the norms established in the Project Operational Manual.

Project Oversight: The Borrower for the proposed project is the Republic of Panama, represented by its Ministry of Economy and Finance (MEF). MEF delegates day-today project implementation to the Ministry of Agricultural Development (MIDA).

A *Steering Committee* (*Comité Directivo*), comprised of representatives of MEF, MIDA, MICI, ANAM, INACOOP and the private sector, would oversee the global execution of the proposed project and provide guidance on its overall scope. Its duties would include: (i) approval of annual operating plans (POAs); (ii) oversee project performance; and (iii) suggest necessary project adjustments based on results of the monitoring and evaluation system.

Project Coordination: MIDA would directly coordinate three of the project components: Support to Productive Alliances, Productive Alliances; and Project Management, Monitoring and Evaluation. The remaining component – Environmental Investments – would be coordinated and monitored by ANAM, through its Department of Biological Corridors (DBC/ANAM) and under the partially-blended GEF operation. The proposed project would be led by a Coordinator and assisted by a cadre of technical specialists, an administrator, training officer, monitoring and evaluation specialist, area coordinators, a financial expert, and an accountant. MIDA would (i) prepare annual operating plans (POAs) and all project reports as agreed with the Bank and the Steering Committee; (ii) evaluate and approve for financing those business plans proposed by prospective alliances; (iii) conduct the overall project financial management and (iv) carry out the project's monitoring and evaluation system with support from other MIDA agencies.

Subprojects under Components 2 and 3 would be implemented by RPAs, community associations and productive alliances. Once subprojects have been identified, prepared and approved for funding, a subproject agreement will be signed between MIDA (Component 2) or ANAM (Component 3) and the beneficiary association, which will specify the activities to be performed, total subproject financing and the disbursement calendar. These beneficiaries will be responsible for procurement activities to be performed during the subproject implementation, as well as administering funds, preparing reports, and managing payments to contractors.

Productive Alliance Facilitators (PAFs): will be contracted by MIDA to be its principal interface with the intended beneficiaries in the project area of Herrera, Los Santos and Veraguas. The PAF would stimulate project participation and aid in the formation of RPAs (as needed), the preparation of the initial *perfil de negocio* (business proposal) and eventual Business Plan.

Technical Service Providers: MIDA would finance the training and subsequent certification of qualified service providers to assist RPAs in forming productive alliances and preparing and

implementing Business Plans and subprojects. MIDA would maintain a positive list of Technical Service Providers and make it available to RPAs in the project area. RPAs would contract directly these Technical Service Providers, as needed, during Business Plan preparation and subproject execution. The positive list would also form part of the ongoing communication strategy for PRORURAL.

Project Operational Manual: would guide overall project implementation and include all processes, rules and regulations for the implementation of project components. The Operational Manual was reviewed by the Bank during Negotiations and found to be satisfactory. The Project Operational Manual would include: (i) physical performance indicators to be tracked through the Project Monitoring and Evaluation System; (ii) the criteria for targeting activities under Components 1,2 and 3; (ii) the responsibilities of RPAs, MIDA and other partners in the implementation of business plans for the productive alliances; (iii) the criteria and procedures for business plan appraisal, whether economic, financial, environmental, institutional, social or technical; (iv) standard project designs and their role in the appraisal of proposals submitted by RPAs; (v) model forms for subproject agreements; and (vi) standard forms for business plan proposals to be submitted by potential beneficiary RPAs. A user-friendly synthesis of the Project Operational Manual would be made available to RPAs and prospective Productive Alliances at their request.

Annex 7: Financial Management and Disbursement Arrangements
PANAMA: RURAL PRODUCTIVITY PROJECT

Summary Conclusions of Financial Management Assessment.

On the basis of the preliminary assessments performed, the financial management team presents the following conclusions:

(i) Project coordination and administration will fall under the Ministry of Agricultural Development (MIDA) for three project components (components 1, 2 and 4): (i) Support to Productive Alliances, (ii) Productive Alliances; and (iii) Project Management and Monitoring; and the fourth component (component 3) on Environmental Investments will fall under the National Environment Authority (ANAM).

(ii) MIDA, through its Financial Unit, and ANAM through its department of Biological Corridors (DBC/ANAM) will be directly in charge of FM tasks for their respective components.

(iii) The FM capacity assessment (FMA) has identified project-specific actions in order to strengthen the FM capacity of MIDA and DBC/ANAM and enable them to carry out the financial activities of the proposed project effectively.

(iv) Once MIDA and DBC/ANAM carry out the proposed action plan presented in this assessment, it would have in place adequate FM arrangements that meet the Bank's minimum fiduciary requirements to manage the specific financial activities of the proposed project.

More detailed information on DBC/ANAM can be found in the Project Appraisal Document of the GEF Grant TF056288.

It is important to note that, in accordance with the project implementation strategy in Panama supported by the Bank and the Government to institutionalize project implementation where capacity exists within the Ministry, MIDA will be responsible for the financial management aspects of the project, while ANAM will utilize the services of a funds administrator.

MIDA

Organizational Arrangements and Staffing

Overall project coordination and administration will fall under MIDA for three project components (components 1, 2 and 4): (i) Support to Productive Alliances, (ii) Productive Alliances; and (iii) Project Management and Monitoring. It was found that the staff within MIDA's Finance Unit possesses adequate qualifications and experience to carry out their responsibilities. Therefore, within MIDA, the Finance Unit will be directly responsible for financial management (FM) tasks for the proposed project. These will basically include: (i) budget formulation and monitoring; (ii) cash flow management (including processing payments and submitting loan withdrawal applications to the Bank); (iii) maintenance of accounting records;

(iv) preparation of in-year and year-end financial reports; (v) administration of underlying information systems; and (vi) arranging for execution of external audits.

In order to carry out the financial activities of the proposed project (in addition to the existing workload), the Financial Unit would need additional staff, potentially financed by the loan (namely, a Treasury Assistant and a Budget Assistant). In addition, a qualified Accountant has been contracted in order to ensure the monitoring of the financial activities of the proposed project.

Activities (subprojects) under Components 2 would be implemented by rural producer associations (RPAs). Once subprojects have been identified, prepared and approved for funding, an agreement will be signed between MIDA and the beneficiary RPA, which will specify the activities to be performed, the amount of the subproject and the disbursement calendar (using the CDD guidelines). These beneficiaries will be responsible for procurement activities to be performed during the implementation of the subproject, as well as administering funds, preparing reports, and managing payments to contracted participants.

Budget Planning

Between July and September of each year, MIDA will prepare its tentative investment program for the next year and submit it to MIDA's Planning Department for inclusion in MIDA's overall budget. The program should be consistent with the budget policy provided by the Ministry of Economy and Finance, and be incorporated into the national budget for its submittal to Congress in September. On the basis of the approved budget, MIDA will adjust as needed its project annual work (POA) and procurement plan, which will be reviewed by the Bank.

Accounting and Financial Reporting

Accounting Policies and Procedures. The main FM regulatory framework for the project will consist of: (i) Panama's laws governing budget management; (ii) MIDA's operating manuals; and (iii) the Unit's operating norms. Project-specific FM arrangements that are not contemplated in the documents cited above will be documented in a concise FM section of the project's operational manual. Among others, specific reference will be made to: (i) the internal controls appropriate for the project; (ii) the internal controls (e.g., payment terms and clearance of advances) related to agreements with communities; and (iii) the formats of project financial and audit reports.

Information Systems. The financial activities of the project (especially budget and budget execution) will be recorded in SIAFPA. In addition, to meet the reporting requirements of the proposed project, MIDA will be implementing a complementary system which will compile the necessary information for the preparation of financial statements. The proposal is to design a system which will be able to capture the accounting information directly from SIAFPA and prepare the necessary financial statements for the project (which currently are not available in SIAFPA). MIDA has already hired a firm for the design of the system (which will be called Pentagon), and is expected to implement the system prior to effectiveness of the project.

Financial Reports. On a *semestral basis*, as part of project progress reporting, MIDA will prepare and submit to the WB an unaudited interim financial report (IFR) containing: (i) a statement of sources and uses of funds and cash balances (with expenditures classified by subcomponent) and (ii) a statement of budget execution per subcomponent (with expenditures classified by the major

budgetary accounts). The interim reports will be submitted not later than 45 days after the end of each semester. At the beginning, the IFRs will only be used for monitoring purposes. Once the system to produce IFRs has been tested, it may be used also for disbursement purposes, in which case, the following annexes would be required: (i) a Designated Account activity statement (including a copy of the bank statement); (ii) a summary statement of Designated Account expenditures for contracts subject to prior review and (iii) a summary statement of Designated Account expenditures for contracts not subject to prior review.

On an *annual basis*, MIDA will prepare project financial statements including cumulative figures, for the year and as of the end of that year, of the financial statements cited in the previous paragraph. The financial statements will also include explanatory notes in accordance with the Cash Basis International Public Sector Accounting Standard (IPSAS), and MIDA's assertion that loan funds were used in accordance with the intended purposes as specified in the Loan Agreement. These financial statements, once audited, will be submitted to the Bank not later than six months after the end of the Government's fiscal year (which equals the calendar year). The supporting documentation of the semestral and annual financial statements will be maintained in the Unit's premises, and made easily accessible to Bank supervision missions and to external auditors.

Flow of Funds

World Bank Disbursement Method. Loan proceeds will be withdrawn by MIDA using the advance method supported by documentation showing that the loan proceeds previously withdrawn have been used to finance eligible expenditures. Supporting documentation will be in the form of Statement of Expenditures (SOEs), at least initially, with the exception of payments related to contracts above the SOE threshold, which will be reimbursed against full supporting documentation. The SOE threshold for the project has been set at $100,000 for goods, works, non-consultants services, consultants, training and operating costs for the various components of the project (categories 1, 2, 5 and 6 of the project). Productive Subprojects and Environmental Subprojects will be reported using Statements of Expenditures (SOEs). Once the system for producing IFRs has been tested and found satisfactory to the Bank, the supporting documentation may be changed to interim unaudited financial reports (IFRs).

Other Procedures. At appraisal, no need was identified for the use of special commitment procedures. Should the need arise during implementation; the Bank will evaluate it and if granted, agree to their use via an amendment to the Disbursement Letter. The project may use reimbursement or direct payments.

World Bank Designated Account. MIDA will open a Designated Account in *Banco Nacional* in Panama in US dollars, to be used exclusively for deposits and withdrawals of loan proceeds for eligible expenditures. After the conditions of effectiveness have been met, and the designated account has been opened, MIDA will submit its first disbursement request to the Bank, together with the expenditure and financing needs forecast for the next six months. For subsequent withdrawals, MIDA will submit the disbursement request, along with the supporting documentation (SOEs or IFRs). At any time, the undocumented advance to the designated account cannot exceed the authorized ceiling, which has been established at $3 million.

Flow of Funds – In General. The Finance Unit of MIDA will make all payments for the three components, except for payments done under sub-projects (under component 2), which will be

made directly by the beneficiaries of the sub-project (under the CDD guidelines). For sub-projects, once an agreement is signed between MIDA and the rural producer organization, and/or alliance, a separate account for the sub-project will be opened to receive the disbursements from MIDA. The account will be opened in a local bank with the first disbursement, which will be an advance based on the needs of the sub-project for a determined period of time (but no more than 30 percent of the total value of the sub-project). Subsequent disbursements will be made based on financial and physical progress report received from the community and reviewed by MIDA.

Disbursement Deadline Date. Four months after the closing date specified in the Loan Agreement.

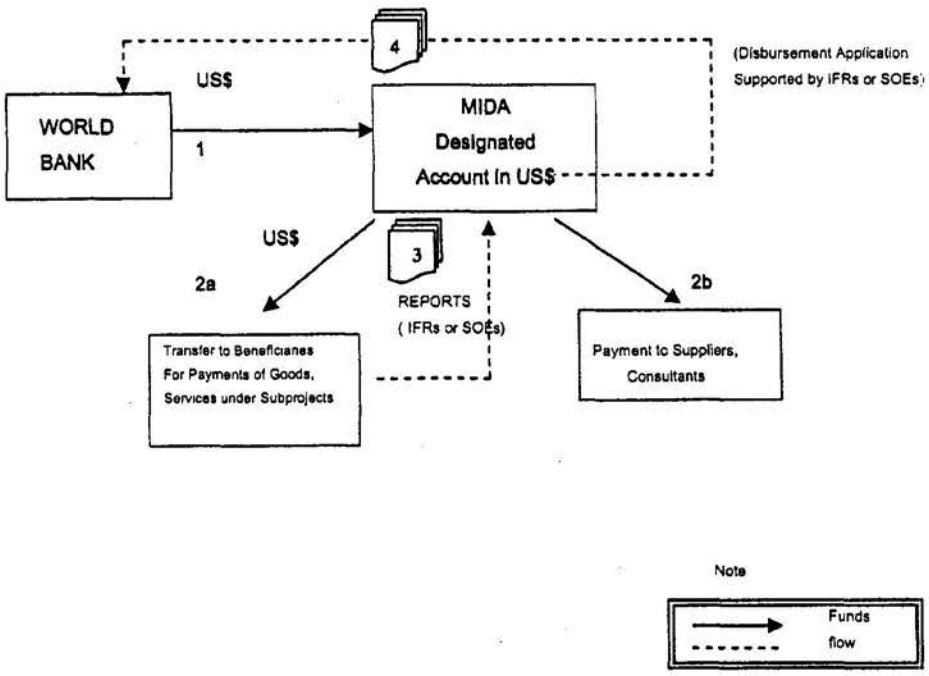


Figure A: Flow of Funds

Audit Arrangements

Internal Audit. In the course of its regular internal audit activities vis-à-vis the institutional budget, MIDA's internal auditors may include project activities in their annual work plans. If such audits occur, MIDA will provide the Bank with copies of internal audit reports covering project activities and financial transactions.

External Audit. The annual project financial statements prepared by MIDA will be audited following International Standards on Auditing (ISA), by an independent firm (or the Controller General of Accounts, subject to prior agreement with the Bank) and in accordance with terms of reference (TORs), both acceptable to the Bank. The audit opinion covering project financial statements will contain a reference to the eligibility of expenditures. The scope of the audit will

also include a sample review of sub-project expenditures and procurement processes. In addition, memoranda on internal controls ("management letters") will be produced on a semi-annual basis.

The audit work described above can be financed with loan proceeds. MIDA will arrange for the first external audit within three months after loan effectiveness. Each audit engagement is expected to cover at least two years.

ANAM

Organizational Arrangements and Staffing

Overall project coordination and administration will fall under the National Environment Authority (ANAM) for component 3 (Environmental Investments). Within ANAM, the Department of Biological Corridors (DBC) will be directly in charge of financial management (FM) tasks. These will basically include: (i) budget formulation and monitoring; (ii) cash flow management (including processing payments with the funds administrator and submitting loan withdrawal applications to the Bank); (iii) maintenance of accounting records; (iv) preparation of in-year and year-end financial reports; (v) administration of underlying information systems; and (vi) arranging for execution of external audits. The recently closed Atlantic Mesoamerican Biological Corridor I project financed by the World Bank was managed by DBC, which puts it in a good position to take over the financial management functions of the proposed project.

DBC is currently operating with minimal staffing and has agreed to hire an FM Specialist (eligible for financing under the partially-blended GEF grant) to provide assistance with the Bank-financed project.

Activities (sub-projects) under component 3 would be implemented by organized community associations or local administrating agencies (such as NGOs, associations and cooperatives), in cases where community associations are not legally constituted. Once sub-projects have been identified, prepared and approved for funding under the Environmental Investment Fund (EIF), an agreement will be signed between ANAM and the organized community association or the local administrating agency, which will specify the activities to be performed, the amount of the sub-project and the disbursement calendar. Organized community organizations or local administering agencies will be responsible for procurement activities to be performed during the implementation of the sub-project, as well as administering funds, preparing reports, and managing payments to contracted participants.

Budget Planning

Between July and September of each year, DBC/ANAM will prepare its tentative investment program for the next year and submit it to their Planning Departments for inclusion in its overall budget. The program should be consistent with the budget policy provided by MEF, and be incorporated into the national budget for its submission to Congress in September. On the basis of the approved budgets, DBC/ANAM will adjust as needed its project annual work (POA) and procurement plan, which will be reviewed by the Bank.

Accounting and Financial Reporting

Accounting Policies and Procedures. The main FM regulatory framework for the project will consist of: (i) Panamanian law governing budget management; (ii) DBC/ANAM operating manuals; and (iii) DBC/ANAM operating norms. Project-specific FM arrangements that are not contemplated in the documents cited above will be documented in a concise FM section of the project operational manual. Among others, specific reference will be made to: (i) the internal controls appropriate for the project; (ii) the internal controls (e.g., payment terms and clearance of advances) related to agreements with beneficiaries; and (iii) the formats of project financial and audit reports.

Information Systems. It will be the responsibility of DBC/ANAM to maintain accounting records specific to the project, and ensure that project execution data is reported on a timely basis to ensure its incorporation into the government's records. DBC/ANAM will maintain a simple financial system to compile project financial statements, using a computerized financial management system. The system will have the ability to classify financial information by project component, categories of disbursement and sources of financing; and produce useful financial reports (such as interim financial reports-IFRs and Statements of Expenditures -SOEs).

Financial Reports. On a *semestral basis*, as part of project progress reporting, DBC/ANAM will prepare and submit to the Bank an unaudited interim financial report containing: (i) a statement of sources and uses of funds and cash balances (with expenditures classified by subcomponent); (ii) a statement of budget execution per subcomponent (with expenditures classified by the major budgetary accounts). The interim reports will be submitted not later than 30 days after the end of each semester. At the beginning, the IFRs will only be used for monitoring purposes. Once the system to produce IFRs has been tested, it may be used also for disbursement purposes, in which case, the following annexes would be required: (i) a Designated Account activity statement (including a copy of the bank statement); (ii) a summary statement of Designated Account expenditures for contracts subject to prior review and (iii) a summary statement of Designated Account expenditures for contracts not subject to prior review.

On an *annual basis*, DBC/ANAM will prepare project financial statements including cumulative figures, for the year and as of the end of that year, of the financial statements cited in the previous paragraph. The financial statements will also include explanatory notes in accordance with the Cash Basis International Public Sector Accounting Standard (IPSAS), and ANAM's assertion that loan funds were used in accordance with the intended purposes as specified in the Loan Agreement. These financial statements, once audited, will be submitted to the Bank not later than six months after the end of the Government's fiscal year (which equals the calendar year). The supporting documentation of the semestral and annual financial statements will be maintained on the premises of DBC/ANAM, and made easily accessible to Bank supervision missions and to external auditors.

Flow of Funds

For the Environmental Investments component, ANAM is planning to use an administrator of funds. Loan proceeds will be withdrawn by ANAM using the advance method. Under this method, the Bank will advance loan proceeds into the Administrator's USD account (in a commercial bank) to finance eligible expenditures as they are incurred. Replenishment of the advance will be based on the submission of a withdrawal application by ANAM, supported by documentation showing that the loan proceeds previously withdrawn have been used to finance eligible expenditures. Supporting documentation will be in the form of Statement of Expenditures

(SOEs), with the exception of payments related to contracts subject to the Bank's SOE threshold, which will be reimbursed against full supporting documentation. The SOE threshold for the project has been set at $100,000 for goods, works, non-consultants services, consultants, training and operating costs for the various components of the project (categories 1, 2, 5 and 6 of the project). Productive Subprojects and Environmental Subprojects will be reported using Statements of Expenditures (SOEs). Once the system for producing IFRs has been tested and found satisfactory to the Bank, the supporting documentation may be changed to interim unaudited financial reports (IFRs).

The administrator would be contracted solely as a payment agent under terms and conditions acceptable to the Bank. An FM assessment would be conducted by the Bank before any advances are made, confirming that the administrator has the adequate administrative capacity, internal controls, and accounting and auditing procedures in place.

Other Procedures. At appraisal, no need has been identified for the use of special commitment procedures. Should the need arise during implementation; the Bank will evaluate it and if granted, agree to their use via an amendment to the Disbursement Letter. However, reimbursement and direct payments may be used.

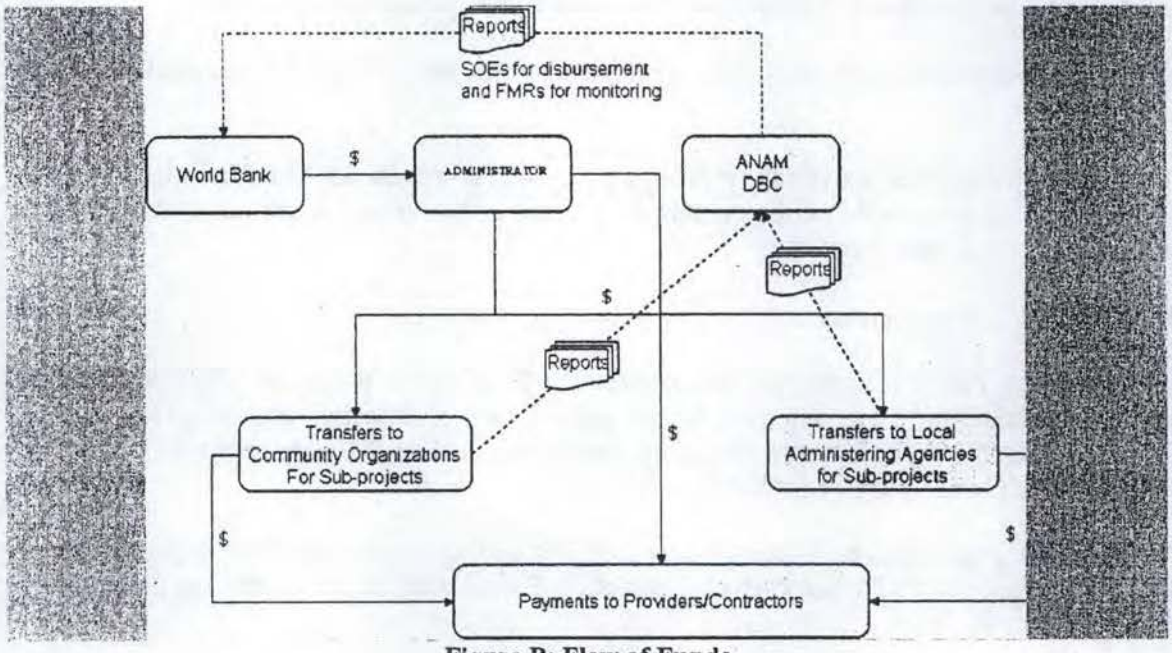


Figure B: Flow of Funds

Flow of Funds – Subprojects. Once a subproject agreement is signed between DBC/ANAM and the beneficiary, the beneficiary will open a separate account for the subproject to receive the disbursements from DBC/ANAM. The account will be opened in a local bank with the first disbursement, which will be an advance based on the needs of the subproject for a determined period of time (but no more than 30 percent of the total value of the subproject). Subsequent disbursements will be made based on financial and physical progress report received from the community and reviewed by DBC/ANAM.

Disbursement Deadline Date. Four months after the closing date specified in the Loan Agreement.

Audit Arrangements

Internal Audit. In the course of its regular internal audit activities vis-à-vis the institutional budget, internal auditors for ANAM may include project activities in their annual work plans. If such audits occur, ANAM will provide the Bank with copies of internal audit reports covering project activities and financial transactions. However, ANAM's internal audit department has limited capacity in terms of staffing (currently four qualified internal auditors) and does not currently have a manager. As a result, to mitigate the risk that the project may not be audited by ANAM's internal audit department, the Bank will require semestral visits from the external auditors, resulting in the submission to the Bank of the correlated management letters.

External Audit. The annual project financial statements prepared by ANAM/DBC will be audited following International Standards on Auditing (ISA), by an independent firm (or the Controller General of Accounts, subject to prior agreement with the Bank) and in accordance with terms of reference (TORs), both acceptable to the Bank. The audit opinion covering project financial statements will contain a reference to the eligibility of expenditures. The scope of the audit will also include a sample review of subproject expenditures and procurement processes.

In addition, memoranda on internal controls ("management letters") will be produced on a semi-annual basis.

The audit work described above can be financed with loan proceeds. ANAM/DBC will arrange for the first external audit within three months after Grant Effectiveness. Each audit engagement is expected to cover at least two years.

Disbursement Arrangements

New Eligibility Policy. The project incorporates the Bank's new policy on eligibility for Bank financing. This policy was approved by the Bank Board of Directors on April 13, 2004. To implement the policy, the Country Financing Parameters for Panama were approved by the LCR Regional Vice President on December 23, 2004.

The proposed loan would be disbursed over a period of five years, from Effectiveness which is expected on July 30, 2007. The Project Completion Date is July 31, 2012, and the Loan Closing Date is January 31, 2013.

The following table summarizes, by component/subcomponent, the agreement on the amount of the loan, the use of funds, and when the Bank will recognize expenditures, for the activities to be financed with Loan proceeds.

Component	Responsible	Description (use)	Recognition of Expenditures
1. Support to Productive Alliancess	MIDA	Goods, non consultant services, consultants, training, operating costs	Upon payment to consultants and suppliers.
2. Productive Alliances	MIDA	Productive subprojects	Upon transfers to Beneficiaries in tranches according to work program in each subproject agreement between MIDA and beneficiary.
3. Environmental Investments and Strengthening of the NPAS	DBC/ANAM	Civil works, goods, non consultant services, consultants, training, operating costs Environmental Subprojects	Upon payment to contractors. suppliers, consultants, and travel and per diem to trainees Upon transfers to beneficiaries according to work program in subproject agreement
4. Project Management, Monitoring and Evaluation	MIDA	Civil works, goods, non consultant services, consultants, training, operating costs	Upon payment to contractors, consultants and suppliers.

Disbursement Schedule

Expenditure Category	Loan Amount (US$)	% of Expenditures to be Financed
1. Goods, Works, Non-Consultants Services, Consultants, Training, and Operating Costs for Component 1	6,400,000	100%
2. Productive Subprojects	19,000,000	100%
3. Environmental Subprojects	6,000,000	100%
4. Civil Works, Goods, Works, Non-Consultants Services, Consultants, Training, and Operating Costs for Component 3	2,350,000	100%
5. Goods, Works, Non-Consultants Services, Consultants, Training, and Operating Costs for Component 4	3,350,000	100%
6. Refinancing of PPF	900,000	100%
7. Unallocated	1,400,000	
Total	**39,400,000**	

Risk Assessment Summary

The FM risk for this project has been assessed at *Substantial.* To mitigate the risk of mismanagement of funds by RPAs and community organizations, actions, such as the development of a subproject manual (to be shared with RPAs and community organizations) and the inclusion of both productive and community subprojects in the scope of the annual external audit, have been included in the FM arrangements. In addition, at the country level, the project implementation performance has been impaired in the past by cumbersome and often lengthy internal procedures on payment authorization. To mitigate the risk of delayed implementation, the Government and the Bank are working on streamlining procedures while increasing capacity within certain line ministries, including MIDA. ANAM/DBC has decided to utilize a fund administrator on the conditions stipulated above in this Annex.

Financial Management Action Plan

Action	Responsible Entity	Completion Date[1]
1. Finalize the draft format of unaudited financial reports (IFRs).	MIDA/ANAM	Completed
2. Finalize the draft FM section of the project operational manual.	MIDA/ANAM	Completed
3. Finalize draft audit TORs and short list.	MIDA/ANAM	Completed
4. Finalize the TORs for key positions in MIDA and ANAM/DBC (including the FM Specialist and Accountant).	MIDA/ANAM	Completed
5. Prepare a draft manual for the implementation of sub-projects by community organizations and local administering agencies.	MIDA/ANAM	Completed
6. Sign the contract with Administrator for administering the funds.	ANAM/DBC	April 2007
7. Identify and, if possible, incorporate required incremental FM staff assistance.	MIDA/ANAM	May 2007
8. Chart of accounts finalized and creation of new company in the system.	MIDA/ANAM	May 2007
9. Final issuance of the draft documents prepared before negotiations (see above).	MIDA/ANAM	May 2007
10. Contract external auditors, based on short list satisfactory to the Bank.	MIDA/ANAM	3 months after effectiveness

WB FM Supervision Plan. A Bank FM Specialist should perform a supervision mission prior to effectiveness to verify the implementation of the unit and the FM system. After effectiveness, the FM Specialist must review the annual audit reports, should review the financial sections of the quarterly IFRs, and should perform at least two supervision missions per year.

Retroactive Financing

The loan will finance eligible expenditures under Component 1 and 4 up to an aggregate amount of US$1.0 million incurred between January 23, 2007 and loan signing.

[1] This column solely presents the estimated completion date, not an indication of legal conditions.

Annex 8: Procurement Arrangements

PANAMA: RURAL PRODUCTIVITY PROJECT

1. General

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The general description of various items under different expenditure categories is described below. For each contract to be financed by the Loan, the different procurement methods or consultant selection methods, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank project team in the Procurement Plan for 18 months (PAC-18). The PAC-18 will be updated at least annually or earlier as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement Summary

The total cost of the Project is US$46.9 million, which includes US$39.4 million of IBRD financing. As described in Annex 6, three of the project components will be managed by MIDA and the fourth on Environmental Investments will be managed by DBC/ANAM. Both agencies will be responsible for procurement of their components, done directly by the PCU and DBC, and supervision of procurement activities under subprojects carried out by the beneficiaries.

The methods to be used for procurement of goods and non-consultant services under the project are described below with estimated amounts.

Procurement of Small Works

Only small works will be procured under this project, with values estimated at US$89,000 and would consist of the rehabilitation of project offices. Procurement will be done according to shopping procedures specified in Para. 3.5 of Procurement Guidelines.

Procurement of Goods and Non Consulting Services

Goods and non-consulting services procured under this project would include vehicles, computer and office equipment, software office furniture, printing and reproduction of promotional and training materials and logistic expenses for seminars/workshops, totaling US$2.2 million equivalent. To the extent possible, contracts for goods and non-consulting services will be grouped into bidding packages of more than US$50,000 and procured following NCB procedures, using Bank standard bidding documents. Contracts with estimated values below this will be procured by shopping procedures, as specified in Para. 3.5 of the Procurement Guidelines, using a model request for quotations satisfactory to the Bank.

Selection of Consultants

Consulting services will be contracted under this project for technical assistance, studies and capacity building. These services are estimated to cost US6.6 million.

Firms. Most contracts for firms would be procured using QCBS, when their value exceeds US$100,000 equivalent. For small and simple assignments that can be precisely defined and are of a standard or routine nature (such as auditing) may be procured using Least Cost or Fixed Price Selection procedures. Consultants' Qualifications Selection, as described in Para. 3.7 of Guidelines may be used only for contracts below US$50,000 equivalent. Specifics will be agreed in the PAC-18.

Individuals. Specialized advisory services would be provided by individual consultants selected competitively, by comparison of qualifications of at least three qualified candidates in accordance with the provisions of Section V of the Consultant Guidelines. All contracting of technical assistance of individuals will be done using a model contract form agreed with the Bank.

Training

Training activities to be financed under the proposed project would include workshops, seminars, consultation meetings for dissemination and capacity building, study tours for staff of executing agencies working in project activities. The loan will also finance logistical and travel expenses, per diems of trainers and trainees, registration fees, and printing and reproduction of small quantities of training materials using administrative procedures acceptable to the Bank. All technical assistance contracts for the provision of training by firms and individuals will be governed by Bank's Guidelines for Consultants (May 2004).

Operating Costs

Operating costs will include reasonable incremental expenditures to carry out supervision of the project such as travel, accommodations, and per diem costs for MIDA and ANAM's technical and support staff contracted to assist with project activities; leasing of facilities, utilities and communication expenses, including Internet connectivity, maintenance of office facilities and vehicles and office equipment; consumable office materials and supplies; rentals of vehicles and other equipment required for project support, selected taxes.

Procurement under Productive and Environmental Subprojects

Matching grants to rural producer associations (RPAs) would support investments for productive subprojects managed by MIDA, and to community associations and rural producer organizations for environmental subprojects managed by DBC/ANAM. In both cases, the matching grants would be demand-driven and support the costs of needed investments in productive infrastructure, technical assistance, goods, works, and related services. Eligibility and selection criteria for productive and environmental subprojects would be described in the Operational

Manual. Procurement for subprojects would be a responsibility of the beneficiaries, and would follow to the extent possible shopping/commercial practices procedures detailed in the Procurement Chapter of the Operational Manual. Goods and non-consulting services in subprojects may be of different types according to the nature of the productive subproject and may include seeds, tools, plants and other similar physical inputs.

2. Assessment of the Agency's Capacity to Implement Procurement

MIDA

The Procurement Capacity Assessment of MIDA was carried out on August 18-22, 2006.

Organization and Staffing. The mission identified important risks in the present institutional arrangements of MIDA, related to the limited competencies and staff skills to conduct or supervise procurement activities. By contrast, the mission confirmed that the institutional procurement unit in MIDA shows potential to assume the institutional responsibility for procurement in the project. The unit shows a group of professional procurement analysts presently engaged in a substantial portfolio of activity for institutional MIDA procurement. In addition, the Procurement Chief presently in office has been involved in multilateral experiences in other ministries in Panama, thus offering a relatively low curve in learning Bank procedures. The staffing, information, and other internal arrangements in the procurement unit are commensurate with public sector normal institutional practice. Notwithstanding, provisions have been made to ensure that the workload of the PAC-18 of the project does not affect present MIDA's operations nor future operations under the project, ensuring that project costs include the required physical and human resources to keep this unit in satisfactory performance conditions.

Overall Risk. Notwithstanding this institutional capacity potential, the risks during implementation is forecasted as HIGH due to the learning curve of all involved, including beneficiary associations (i.e., RPAs) undertaking procurement under their subprojects. The assessment recommends that this risk assessment be updated after six months of implementation, when the demand strategy of rural subprojects be agreed since this strategy will determine the percentage value of procurement activities conducted by MIDA's institutional areas and the requirements for supervision A Procurement Action Plan has been initially discussed with MIDA and is now under implementation to ensure readiness as project is launched.

Procurement Plan. A specific PAC-18 for MIDA will be prepared, not later than negotiations, reflecting the activities in which both agencies (MIDA and ANAM) are involved for this particular project.

ANAM

In connection with the GEF TF56628, a Procurement Capacity Assessment of ANAM was carried out on March 14-17, 2006. Detailed information on the assessment is described in the Project Appraisal Document of the GEF Grant TF056628.

Overall Risk Assessment. The procurement activities under the proposed project are very similar to those carried out under GEF indicating that mostly are straightforward, with a limited number of major contracts during project execution. However, in view of (a) the large component of CDD procurement activities in rural and distant communities, (b) the limited availability of detailed CDD procedures in the OM for subprojects to assist the communities, service providers, and DBC/ANAM in the monitoring and supervision of purchases in the subprojects, and (c) the process of full working institutionalization of DBC/ANAM, the assessment of this project is still considered HIGH. This assessment may be revised at the time of updating MIDA's assessment, once activity is well underway with GEF.

Frequency of Procurement Supervision. In addition to the prior review supervision to be carried out from Bank offices, the capacity assessments of MIDA and ANAM one post review per year. Additional supervision mission may be agreed depending on outcomes in PAC-18 during implementation.

3. Details of the Procurement Arrangement and Special Arrangements

Goods and Works and non-consulting services.

List of contract Packages which will be procured following ICB and Direct contracting: None expected.

The Procurement Plan for 18 months will detail all contracts (including those proposed to be signed with service providers), where information on prior and ex-post review agreements will be make. All direct contracts shall be subject to Bank's prior review.

The PAC-18 will also include information on the size of the annual subproject purse to be awarded to communities, supported by CDD arrangements and the thresholds to be agreed for purchases of beneficiaries using commercial practices Direct contracting in support of subproject execution by rural community associations would follow procedures detailed in the Procurement Chapter of the OM

Consulting Services.

(a) List of Consulting Assignments with short-list of international firms: None expected.

(b) Selection of consultants (firms) for assignments estimated to cost above US$100,000 equivalent, and any single source contract, regardless of cost, and contracts awarded under Consultants' Qualifications Selection above US$50,000, will be subject to prior review by the Bank.

(c) Short lists composed entirely of Panamanian consultants: Short lists of consultants for services estimated to cost less than US$200,000 per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

(d) The PAC-18 will detail the thresholds of contracts with individual consultants that will be subject to Bank's Prior Review.

Annex 9: Economic and Financial Analysis

PANAMA: RURAL PRODUCTIVITY PROJECT

Introduction

Business Plans financed under Component Two would be determined by rural producer associations – in the context of proposed productive alliances – during project implementation and, as such, *a priori* estimation of resource allocation is not possible, nor is *ex ante* estimation of their precise cost-effectiveness or rates of return. As a proxy, a pilot exercise was conducted during project preparation, in which three indicative productive alliances and their respective business plans were assessed. Economic rates of return were estimated for these business plans and can therefore serve as an indicator of the viability of future investments that would be financed under Component Two of the proposed project.

This Annex first summarizes (as background) secondary findings from two Bank-financed operations in Brazil and Colombia that provide support to rural productive alliances of similar scale and scope as those expected to be financed under the proposed Rural Productivity project. Second, an assessment of the economic and financial viability of the three pilot productive alliances is presented.

Secondary Data: Brazil and Colombia

Brazil: Pará Integrated Rural Development: Four pilot Business Plans were developed and assessed in the course of project preparation. [1] Each Business Plan would implement a series of separable subprojects that, in the aggregate, would be expected to result in increased household incomes for the participating producers. Total investment for each Business Plans (net of the counterpart contribution of the producer association) is given in Table 1. Each Business Plan comprises some 6-9 individual subprojects. Investment per producer household ranges from US$1,927 (Itacoã) to US$3,537 (Piriá).

Table 1: Pilot Business Plans, Pará Integrated

Producer Association	Families Benefited	Total PIP Investment (R$)	Investment/Fam. (R$)
Itacoã	184	354,471	1,927
Cotijuba	107	355,668	3,324
Arari	300	1,051,285	3,504
Piriá	130	459,834	3,537
TOTAL	**721**	**2,221,257**	**3,081**

Source: Project Appraisal Document

[1] In the project, these are termed Productive Investment Plans (PIPs). Pará Rural was approved by the Board in December 2006.

Activity models were constructed for the four Business Plans and subsequently used to calculate both the financial and economic viability of these investments. A time horizon of 20 years was applied in the analysis and a discount rate of 10 percent was used for the valuation of future benefit and cost flows. Economic and financial internal rates of return were estimated, as well as net present value (NPV) of both the overall investment and the expected returns to each participating producer. Results are presented in Table 2.

Table 2: Activity Model Results, Pará Integrated

IRR (%):	Cotijuba	Arari	Itacoã	Piriá
Economic	>50	27	>50	>50
Financial	>50	21	>50	49
NPV (R$):				
Total PIP	$2,148,673	$1,811,932	$3,484,855	$2,426,327
p/ family p/ year	$1,004	$377	$1,052	$1,036

Source: Project Appraisal Document
Note: US$1 = R$2.263

The IRRs compare favorably with the real cost of borrowing by the Brazilian Government.[2] Expected gains in household income for participating rural producers range from R$854 (Arari) to R$2,381 (Itacoã) and is indicative of an increase of 18 percent to 51 percent relative to the poverty line of R$4,700 defined under the project.

Sensitivity Analysis: To examine the robustness of the IRRs, a sensitivity analysis was conducted on the pilot activity models. Three scenarios are considered. In the first one, benefits are assumed to be 20 percent below the base case, due to, for example, reduced productivity given the same level of inputs. In the second scenario, costs increase by 20 percent over the base case. Finally, the third scenario combines the effects of both the first and second scenarios (i.e., 20 percent reduction in benefits and 20 percent increase in costs). The results of the sensitivity analysis are shown in Table 3.

Table 3: Sensitivity Analysis

20% Reduction-Benefits:	**Cotijuba**	**Arari**	**Itacoã**	**Piriá**
IRR-E	61%	9%	54%	39%
IRR-F	49%	10%	72%	37%
20% Increase – Costs				
IRR-E	66%	13%	58%	41%
IRR-F	51%	12%	75%	39%
20% Reduction-Benefits + 20% Increase – Costs				
IRR-E	40%	-8%	40%	29%
IRR-F	38%	1%	58%	29%

[2] A reference for such borrowing is the Long-term Interest Rate (TJLP).

Three of the four models (i.e., Cotijuba, Itacoã, Piriá) are shown to be quite resilient to variations in both expected benefit and cost flows. In the case of Arari, either a 20 percent reduction in benefits or a 20 percent increase in costs for the PIP reduces both the IRR-E and the IRR-F to marginally satisfactory levels, while their combined effect results in the Arari model becoming non-viable.

Colombia: Productive Partnerships Support Project: The main quantifiable benefit of the project is increased production of agricultural crops. Several important benefits that are difficult to quantify also result from the project: (i) increased social capital through the formation of farmer cooperatives, often in socially fragile areas of the country; (ii) human capital development of farmers through training and capacity-building; and (iii) improved social cohesion and collaboration between various stakeholders and its contribution toward fostering a climate of peace.

The main costs included in the financial analysis are: (i) land; (ii) land preparation for the cultivation of the respective crops; (iii) variable costs associated with the crop production (e.g. fertilizer); (iv) administrative and management costs of the productive alliance; and (v) corresponding taxes. The economic analysis converts financial costs into economic costs using shadow prices, does not take into consideration transfers (e.g. taxes), but does include other costs associated with the alliance (e.g., costs assumed by the local government such as road upgrading; start-up costs for the alliance). For the latter, a *pro-rata* share of the estimated project costs is assigned to each pilot alliance, under the assumption that the costs of helping establish the alliance should be incorporated into the economic analysis.

The *incentivo modular* (i.e., the Bank-financed loan proceeds in support of productive investments under the project) is a subsidy provided by the Government, recognizing the limited access of farmers to affordable long-term finance. As it is a subsidy, this sub-component is excluded from the economic analysis. The economic analysis assumes that the prototype partnerships do not impose negative environmental externalities based on compliance with the proposed environmental mitigation plans.

The financial analysis was conducted from the perspective of an individual farmer based on data collected from field observations and discussions with the farmer cooperatives and agribusiness. The cost of land was derived from local land sale or rental markets (where available). The analysis includes conservative estimates of the fixed costs related to the preparation and improvement of the land and the variable costs associated with the cultivation of the crops. The benefits were determined also based on conservative estimates of long-term productivity and crop prices. The financing required was also estimated for each prototype and may include a commercial loan, a loan from the agribusiness firm in the partnership, farmer savings (if available), and the *incentivo modular*.

In the economic analysis, two main adjustments were made to the financial analysis: (i) inclusion (or exclusion) of certain costs and benefits and (ii) revaluation of costs and benefits to their social opportunity costs. More specifically, these adjustments include costs borne by the municipality or by the project, removing transfer payments such as those resulting from financing, taxes, or subsidies, and using shadow prices to convert financial flows to economic flows in order to reflect the social opportunity cost of land and labor. Relative to the reference

discount rate of 12 percent, all productive partnerships evaluated yielded favorable results. Both economic and financial rates of return are presented in Table 4.

Table 4: Rates of Return, Colombia Productive Partnerships

Investment Plan	Farmers benefited	ERR	FRR
Oil Palm	70	21%	17%
Vegetables	28	>50%	>50%
Agroforestry	50	22%	22%
Oil Palm	70	21%	13%
Cacao	25	18%	16%

Source: Project Appraisal Document

Pilot Productive Alliances: Panama Rural Productivity Project

To assess the cost-effectiveness of the productive alliances to be financed under Component 2, three pilot alliances were constructed under project preparation and are described below:

Coffee: The Alliance – which consists of the Cooperative *La Esperanza de los Campesinos, R.L* . and an association of 100 small-scale coffee producers – seeks (i) increased productivity for 100 hectares of coffee by raising yields from 4 qq per hectare to 25 qq per hectare; and (ii) improved coffee processing so as to achieve up to a 20 percent increase in producer prices. Some 1,000 producers participate in the Cooperative, which is the only wholesale coffee buyer in the region, purchasing 4,000 qq of coffee annually (80 percent of total production). At present, the Cooperative markets some 85 percent of its coffee production in Veraguas, another 3 percent in Panama City, some 4 percent in the district of Sante Fé (where the cooperative is located) and the remaining 8 percent is exported to European markets. The Business Plan puts forth a 10-year investment program totaling US$2.88 million, consisting of (i) fixed investments (e.g., coffee fermentation tanks, shellers, solar dryers) of US$165,600 and (ii) working capital expenditures (e.g., technical assistance, fertilizers, harvest and post-harvest, administrative expenditures) totaling US$2.7 million. PRORURAL – under Component 2 subprojects – would provide financing of US$265,900.

Yucca (*Ñame*): This Alliance has two principal parties: (i) la Asociación de Productores de Raíces y Tubérculos de Ocú, founded, in 1992 and (ii) la Cooperativa de Producción Revdo. Domingo Basterra, R.L., founded in 1992, which processes ñame for both foreign and domestic markets. Together, the Alliance comprises 150 small-scale producers with combined land holdings of 400 hectares producing two varieties of ñame (Diamante 6322 and Hal *babosa*) yielding 250 to 600 qq per hectare, with an average of about 300 qq per hectare. The Business Plan for the Alliance proposes total investment of US$1.7 million consisting of (i) fixed investments totaling US$200,000 for drip irrigation and processing equipment and (ii) working capital, processing and marketing costs totaling US$1.5 million for inputs, labor and technical assistance over a 10-year period. PRORURAL, as subproject financing, would finance 31 percent of the proposed Plan (US$371,500).

Annato (*Achiote*): Participating in this Alliance are (i) an agroexporting firm (BixaColors) and (ii) 50 small-scale producers across three organizations in Los Pozos, Herrera, who currently produce basic grains, sugar cane, tubers and some cattle. The proposed Alliance would make available improved seedlings of Annato (*Bixa Orellana L.*) – for which BixaColors is the exclusive representative in Central America and Panama – and package it with technical assistance for the 50 participating producers. A 20-year contractual agreement would be signed between BixaColors and the producer associations. The Business Plan for the Alliance covers a 4-year period and proposes US$1.275 million in investments, consisting of: (i) US$137,000 borne by the producers to cover tools and minor equipment; (ii) US$856,000 covered by BixaColors for plant stock, technical assistance, vehicles and processing equipment and (iii) US$281,580 (22 percent of total Business Plan investment) in the form of a PRORURAL subproject to finance additional fixed and working capital expenditures, including technical assistance.

A 10-year horizon was applied to each pilot alliance and income and expenditure streams were estimated for the period. Economic rates of return were calculated and are presented in Table 5. Base case EIRRs range from 24 percent (Achiote) to 34 percent (Coffee) and are quite favorable, relative to an opportunity cost of capital in Panama of 12 percent. Rates of return are fairly robust when subjected to sensitivity analysis. Either increased costs or decreased revenues on the order of 10 percent would still maintain the three alliances as viable business investments. However, the combined effect of revenue shortfalls and cost overruns would render both the coffee and ñame alliances non-viable.

Table 5: Economic Analysis – Pilot Productive Alliances, PRORURAL

	Coffee	Ñame	Achiote
Base Case Scenario – EIRR	34%	29%	24%
Sensitivity Analysis:			
Case 1: Increase Costs by 10%:	19%	17%	19%
Case 2: Increase Revenues by 10%:	49%	41%	29%
Case 3: Decrease Revenues by 10%:	18%	15%	18%
Case 4: Increase Costs 10%; Decrease Revenues 10%:	4%	3%	13%
Incremental Income per capita for participating producers (US$)	535	680	2,733
% change (relative to median household income, 2003)	12%	15%	60%

Income gains for the traditional crops of coffee and ñame are rather modest. By comparison, non-traditional opportunities, such as Achiote, have the potential to generate sizable incremental income for the producers taking part in the alliance.

Annex 10: Safeguard Policy Issues

PANAMA: RURAL PRODUCTIVITY PROJECT

World Bank safeguard policies applicable to this project are Environmental Assessment, Natural Habitats, Pest Management, Forests, Cultural Property and Indigenous Peoples.

Summary of Environmental Analysis:

Overview. This project builds on the experience and lessons learned from previous projects with similar design features (e.g., the Rural Poverty and Natural Resource Management Project, the Panama Atlantic Mesoamerican Biological Corridor Project-PAMBC) and is expected to have a strong overall positive environmental impact and advance global biodiversity goals by (a) contributing to more effective management of protected areas and natural habitats, (b) fostering environmentally sustainable productive activities in rural areas that promote preservation of biodiversity of global significance and (c) reducing pressures for the conversion or degradation of natural habitats, including areas of globally significant biodiversity.

Project Summary: Project components are as follows:

Component 1 – Support for Productive Alliances (US$7.6 million) – would finance preparatory activities that contribute to the presentation of viable business plans for proposed productive alliances. Such activities include: (i) a community strategy designed to raise awareness of and stimulate participation in PRORURAL; (ii) business skills and organizational training for small-scale producers; (iii) "training of trainers" in order to qualify technical service providers for work with Rural Producer Associations (RPAs); (iv) the preparation of productive alliance proposals (*perfiles de negocio*), business plans (*planes de negocios*) and subprojects, all presented by RPAs; and (v) specific technical studies and consultancies that contribute to the implementation of PRORURAL and the execution of approved business plans.

Component 2 – Productive Alliances (US$24.7 million) – would finance approximately one hundred subprojects, implemented by RPAs, as part of the overall execution of approved business plans for productive alliances. Subprojects would include: fixed capital (plant and equipment, minor infrastructure), working capital and technical assistance. Subproject finance – limited to the first two years of the approved business plan – would be guided by procedures outlined in the Project Operational Manual.

Component 3 – Environmental Investments and Strengthening of NPAS (US$11.4 million) – would finance small-scale investments in natural resource management and productive opportunities, proposed and implemented by community and producer associations in the fourteen protected areas and associated buffer zones targeted under the partially-blended PAMBC project.

Component 4 – Project Management, Monitoring and Evaluation (US$3.2 million) – would include incremental operational costs of MIDA in the execution of PRORURAL, including goods and services required for the establishment of a monitoring.

Positive Environmental Impacts. Important overall environmental benefits of the project include reduction of deforestation and depletion rates of biodiversity, improvements to degraded lands and slowing of agricultural intervention in strategic areas for biodiversity conservation, reduced soil erosion, improved habitat conditions for biodiversity and improved water quality in pilot watersheds.

Potential Adverse Environmental Impacts. The main potential for negative environmental impacts arises from the subprojects designed and financed through Components 2 (Productive Alliances) and Component 3 (Environmental Investments). *Components 2 (Productive Alliances)* would support productive subprojects in the context of approved Business Plans submitted by prospective Alliances between Rural Producer Associations (RPAs) and at least one commercial partner (e.g., agroprocessor, wholesale agent). These demand-driven subprojects would finance fixed capital (e.g., irrigation systems, machinery and equipment) and working capital to bolster cash flow over the subproject cycle. *Component 3 (Environmental Investments)* would comprise three indicative categories: (a) environmentally-oriented agribusiness to add value to primary production; (b) management of natural resources for alternative products in response to emerging ecomarkets (e.g. Non-Timber Forest Products, ecotourism, handicrafts, wildlife breeding, environmental services); and (c) investments to restore and maintain environmental assets (e.g reforestation, agroforestry, soil conservation). Subproject grants for productive investments would range from US$100,000 to US$400,000; for environmental investments, the range would be considerably less – between US$10,000 and US$30,000. In both cases, beneficiaries (e.g., community associations and RPAs) would contribute at least ten percent of total subproject cost (in cash or in-kind). Subprojects involving involuntary resettlement will not be financed under the project.

Potential impacts that these investments could have on the local environment are diverse and could include: (i) potential release of domesticated (rabbit and iguana) or exotic (tilapia) animal species from captive breeding and aquaculture, including on islands located in the project area; (ii) overexploitation of NTFP, overexploitation and bycatch in traditional scale-scale fishing; (iii) deforestation and erosion in agriculture activities; and (iv) sustainability or habitat impacts of agroforestry.

Environmental Management Plan (EMP). The EMP already exists, is being updated and identifies the requirements for subproject compliance with the national environmental impact assessment (EIA) regulations contained in Executive Decree No. 59, based on the following four categories: (a) no environmental assessment or analysis is required; (b) no environmental assessment but environmental analysis is required; (c) specific environmental assessment required; and (d) full environmental assessment required. These regulations are consistent with the Bank's environmental safeguards.

The EMP presents a detailed screening process with specific criteria and procedures that the MIDA would follow to evaluate proposed subprojects and Business Plans and assign them to a specific EIA category. The screening process will be included in the Project Operational Manual; all subprojects proposed by participating RPAs will be carefully reviewed during the feasibility phase and, where appropriate, mitigating measures will be designed and implemented. To aid the screening process, the EMP also includes a series of matrices that show potential impacts and mitigation measures for indicative subproject categories and a corresponding matrix showing the costs, timetables, institutional responsibilities, indicators of success, and capacity-building requirements for each mitigation measure. Screening procedures would further insure that subprojects would not be located in critical natural habitats or contribute to their conversion. Also, for those community subprojects financed under Component 3, only those which are consistent with the corresponding protected areas management plan would be approved for financing.

Environmental screening of proposed productive alliances would be guided by a Negative List, which would form part of the Project Operational Manual. The Negative List would prohibit project support for, *inter alia*, (i) deforestation or other conversion or degradation of natural habitats (including wetlands); (ii) conversion of shade-grown coffee to open-sun coffee; (iii) introduction of non-native species for aquaculture in watersheds where they are not already established; and (iv) the introduction of non-native animals to islands.

Subprojects that might include small civil works or production support would include a detailed description of specific environmental risks, potential negative impacts and mitigation measures that proponents would have to comply with during subproject execution. To aid this process, the Project Operational Manual would include a section that describes standard Environmental Rules for Contractors that identify best practices to prevent or mitigate negative environmental impacts. Subproject agreements will be signed between MIDA and beneficiary associations (e.g., community associations, RPAs) to would incorporate adequate prevention and mitigation actions are conducted during subproject execution.

MIDA will supervise the subproject execution to ensure that these actions are properly implemented and, when necessary, suggest additional corrective measures. These supervision activities will be part of the monitoring and evaluation of the Project and detailed in the Project Operational Manual.

Compliance with Safeguard Policies

Environmental Assessment (OP 4.01). The project's category B rating requires an environmental assessment to evaluate potential positive and negative environmental impacts and to make recommendations for measures to avoid, minimize, or mitigate adverse impacts. The EA was carried out by MIDA and DBC/ANAM, based on extensive reviews of relevant information, field visits and initial public consultations to discuss the project concept. A seven-day field mission was also conducted to examine more than thirty-five small-scale subprojects financed under the both the Rural Poverty and Natural Resource Management Project and the Panama Atlantic Mesoamerican Biological Corridor Project to assess their environmental impacts. Additional public consultations were also conducted in February 2005 with 54 participants from environmental NGOs, producer groups, grassroots organizations, indigenous communities, and others to present and discuss the results of the EA and get their feedback and observations. The EA is available in the World Bank InfoShop and on the website of MIDA.

The main contents of the EA include: (i) a description of the environmental characteristics of the project area; (ii) expected positive and potential negative environmental impacts of project activities; (iii) a detailed review of national environmental regulations, namely the General Environmental Law (Law 41) and the EIA regulations (Decreto Ejecutivo No. 59), and the Bank's Operational Policies that would be applicable to all project activities; (iv) an EMP; and (v) a strategy to monitor and evaluate the environmental aspects of the project.

The EA discusses the normative role of ANAM as the governmental entity responsible for the implementation of the National Environmental Strategy, which includes a Strategic Participatory Plan, and an Inter-institutional Environmental System that promotes coordination among government agencies to integrate environmental policies across sectors. Strategies for the decentralization of environmental management responsibilities by ANAM to municipal governments are also discussed.

Natural Habitats (OP 4.04) and Forests (OP 4.36). The proposed project would promote the conservation of natural habitats and biodiversity through (a) improved natural resources and Protected Areas management via subprojects financed under Components 2 and 3, respectively, and (b) promotion of sustainable productive activities that could enhance, preserve or, at least, not degrade, the biodiversity value of such habitats. The project EA used a range of existing sources of information and *in situ* analysis to determine the location of natural habitats in the project area, their ecological functions, relative importance, threats, and management issues. The EA, combined with possible subproject activities, determines potential negative impacts, screening procedures, and mitigation policies. Productive, natural resources and biodiversity subprojects that are explicitly intended to benefit natural habitats will be assessed through screening to determine what level of environmental analysis is required in each case.

The EA report identifies potential negative impacts in activities such as agroforestry, aquaculture, captive breeding of native species, and other types of subprojects and sets out prevention and mitigation measures such as biodiversity inventories, careful site selection, evaluation of indirect and cumulative impacts, prevention of water contamination, and use of construction practices that minimize disruption to plant and animal populations.

The project triggers the Forests safeguard policy because it is expected to have a positively impact the health and quality of forests, affect the rights and welfare of people and their level of interaction with forests, and bring about changes in the management, protection, and utilization of natural forests. These impacts are expected to be positive, and are one of the essential goals of the proposed project, particularly in concert with the partially-blended GEF operation. The project does not involve significant conversion or degradation of forest areas, but rather would seek to integrate forests into sustainable rural economic development and protect the vital local and global environmental services and values of forests through community-based natural resources and protected areas management and development.

Subprojects directly affecting forests (under Component 3) may include nurseries, reforestation, ecotourism, improved woodstoves to reduce fuelwood needs, community management of forests and protected areas, soil stabilization programs, microwatershed management, environmental services pilot programs, and small-scale integrated, biodiversity-friendly agroforestry systems.

Pest Management (OP 4.09). The MIDA would screen all productive alliance proposals for any intended pesticide use. The Project Operational Manual would include a Negative List of compounds not eligible for use (e.g., WHO Category IA, IB, and II; Persistent Organic Pollutants [POPs]; and "Dirty Dozen"). Any pesticides procured under the project would require prior review and approval by the Bank during project implementation. Furthermore, as part of the technical assistance and extension services under Component 2, the project would incorporate training for RPAs in integrated pest management and the safe handling (use, storage, transport, and disposal) of pesticides. Although the project triggers the Bank's Pest Management Policy, a stand-alone Pest Management Plan is not required because the (i) quantities of pesticides to be procured under the project are expected to be relatively small and (ii) most productive alliances are not expected to face major pest management issues.

Physical Cultural Resources (OP/BP 4.11). There is a potential albeit low risk to physical cultural property. The Project Operational Manual will include procedures — in the case of civil works — to ensure that the contractors, individuals, or organizations carrying out such activities understand the steps required to assess and, if necessary, protect any chance finds of cultural significance that they encounter.

Involuntary Resettlement (OP/BP 4.12). Project support under Component 3 for the protected areas could, as per OP4.12, potentially lead to restrictions of access to natural resources within said protected areas. Although such restrictions are unlikely, a Process Framework was prepared and disclosed on January 18, 2007[1]. Components 1 and 2, which support the assessment of Business Plans and the financing of associated sub-project proposals, will be screened to ensure that no sub-project results in the involuntary taking of land. Sub-projects will be screened through the use of criteria set forth in the Project Operational Manual to ensure that, if any land acquisition is necessary, said acquisition is carried out through voluntary purchase, lease or donation arrangements. This will be monitored during implementation through the project Management Information System.

Indigenous Peoples (OP/BP 4.10). A detailed Social Assessment was conducted during project preparation to: (i) identify and characterize project beneficiaries; (ii) identify general needs of

[1] This Process Framework will also be used for the partially-blended GEF operation.

technical assistance and training to strengthen social and human capital of community institutions for self-management of natural resources; (iii) identify potential negative impacts associated with the proposed project activities focusing on indigenous and other vulnerable groups and design prevention and mitigation measures; (iv) incorporate lessons learned from the implementation of the Indigenous Peoples Development Plan of the PAMBC project into the proposed Project; (v) prepare the Project's Indigenous Peoples Plan (IPP) to ensure that socio-cultural norms and preferences of the indigenous populations are adequately considered and respected in the project design and during its implementation; and (vi) develop a participation plan to ensure the beneficiaries' involvement in design, execution and evaluation of the project.

This section presents a summary of the methodology, results, conclusions and recommendations of the Social Assessment and the IPP. The IPP is available for public consultation in the World Bank InfoShop and on the website of MIDA.

Methodology

The evaluation consisted of (i) an extensive review of existing socio-economic information and PAMBC project documents and (ii) a wide process of consultations to different potential project beneficiaries and stakeholders in the project area. Consultation included 49 events with 350 participants including 8 workshops, 78 interviews with individuals, twenty group interviews with communities that participated in the PAMBC project, communities that did not, municipal, *corregimiento* leaders, ANAM and MIDA regional and national staff, the Agricultural Development Bank (BDA), Indigenous leaders, rural producers associations, local staff of Health and Education Ministries, and representatives of NGOs (e.g., FUDIS, Fundeprove, Aprosac, Prodeso, Ideas, FOCIV).

For the preparation of the IPP, additional participatory workshops and group and individual interviews of qualified informants from indigenous communities were conducted in Kuna-Yala, Bocas del Toro and Panama.

Principal Results

Project Beneficiaries

The project's beneficiary population (including the partially-blended GEF-financed PAMBC project) is found in 7 provinces and 28 districts of Panama with a total population of approximately 660,000, with an even distribution of men and women. Inside the project area there are four different ethnic indigenous groups (Ngöbe-Buglé, Kuna, Naso-Tribe, Bri bri), in addition to the Afro-Hispanic descendants from the Caribbean Islands, and the peasants who come from other areas of the country. There are approximately 340,000 households in the project area, the majority of which are headed by men (73 percent) in most districts.

The different types of beneficiaries that will participate in the project are: (i) rural indigenous and non-indigenous populations, (ii) rural producer associations and community organizations, which support the productive, social and environmental development of their communities; (iii) local and municipal governments; (iv) indigenous peoples' traditional authorities; and (v) sectoral entities, including ANAM, in the strengthening of their functional role for the construction of human, social, economic and environmental capital in poor communities.

Indigenous Peoples in the Project Area

Based on the 2000 National Census, the indigenous population of Panama consists of 285,231 people (10 percent of the total population). There are 6 major ethnic groups: Ngöbe-Buglé, Kuna, Emberá, Wounaan, Naso or Teribes and Bri-Bri. Ngöbe-Buglé represent 60 percent, Kunas 22 percent and the rest include the remaining 18 percent. The remaining population is composed by *Afro-hispanics*, *Latinos* and other immigrant minorities. Indigenous territories represent 47 percent of the MBC-P region with a territory of approximately 13,000 km^2. The proposed Rural Productivty project would include the territories of the Ngöbe-Buglé; the partially-blended GEF operation would encompass the territories of the Ngöbe-Buglé, Kuna, Naso and Bri bri.

Ngöbe-Buglé is the largest indigenous group in Panama. Their territories are located in the Provinces of Chiriqui, Bocas del Toro and Veraguas. Originally located in the high mountains of northern Panama, they have moved to coastal and low land areas in search for new lands and livelihoods and to avoid land tenure disputes and land degradation.

The Kuna constitute a strongly consolidated nation that has maintained its autonomy in the face of modern Panamanian society. Their territories include the *Comarcas* of Wargani and Madungandi in the Province of Panama and the archipelago of San Blás.

The Nasos are located along the Teribe river in the Province of Boca del Toro, this group has been historically confined to isolation and distance from western cultures. Their territory remains mostly well forested.

The Bri bri is a minority group located in the border with Costa Rica along the Yorokin river in the Bocas del Toro Province. They are related to the Bri bri groups of Costa Rica.

Socio-economic and demographic Information. The average population density of the project area (16 inhabitants/Km^2) is lower than the national average. The population in indigenous groups is skewed towards younger age classes, with 40 percent of the Kuna Yala and Naso-Tribe and 51 percent of the Ngöbe-Buglé populations being between 0-14 years of age.

Indigenous groups are subject to conditions of extreme poverty. More than 93 percent of the Ngöbe-Buglé and 82 percent of the Kuna Yala populations have incomes lower than the minimum wage. Access to basic health, education and sanitation services are very limited to most communities. Rates of infant mortality in these communities are the highest in the country. Illiteracy is also high, with a rate of 38.5 percent in the Kuna Yala and 46 percent in de Ngöbe-Buglé *Comarcas*.

Legal and Institutional Aspects. The indigenous groups of the project area maintain institutional and political systems that are rich and complex, and entail different levels of consensus building. Social capital is expressed in highly organized leadership and decision-making systems, as well as in hierarchical institutions and cultural identity – elements that play a key role in biodiversity conservation.

Five of the seven indigenous territories are constituted in *Comarcas*. *Comarcas* are governed by General, Regional and Local Congresses, based on traditional authorities (*caciques*). The establishment and administration of *Comarcas* is ruled under the *Special Law for the Creation of*

Comarcas and the *Organic Letter* of the Political Constitution of Panama. The PAMBC project actively supported the efforts of the Naso community to constitute their *Comarca*.

The current system based on indigenous authorities and indigenous congresses is relatively new. Conflicts between traditional and new leaders, political leaders and indigenous NGO's with regards to government decisions and promotion of indigenous perspectives are common in most *Comarcas*. Conflicts are usually aggravated by the influence of internal factors as well as federal government agencies, donors, and NGO's. During consultations, indigenous leaders have made it clear that political institutions that regulate each indigenous group should be the main interlocutor with other social actors and collaborative government institutions working in the proposed project.

Management of Natural Resources and Biodiversity Conservation. Traditionally, indigenous communities have had a close interaction with the natural environment and their livelihoods depend on the use of natural resources. Communities in the project area have a broad knowledge about traditional uses of plants, animals soil and microclimate and their extractive and productive systems are largely sustainable. The General Environmental Law of 1998 (*Ley 41*) recognizes the rights of all indigenous peoples regarding traditional knowledge for the management and conservation of their natural resources. The increasing interaction of indigenous peoples with local and national markets for the trade of their products, however, poses some threats regarding fair trade and ecological sustainability that will require special attention during project execution.

The principal threats to biodiversity in the project area are associated with agricultural colonization, unsustainable agricultural practices, forestry investments, public and private infrastructure and mining projects. Under the pressure of the market economy, demographic growth and economic interests of private entrepreneurs, some communities are now using non-sustainable practices including large scale forest clearings for agriculture, overuse of marine ecosystems and extensive cattle ranching in step slopes. Agricultural colonization is directly and indirectly associated with national development projects such as the road construction in the Chiriquí Province that threatens the Naso and Ngöbe-Buglé *Comarcas*, and road construction in the area of Narganá in the western limit of the Kuna-Yala *Comarca*.

Main Conclusions and Project Design Considerations

This section presents the main conclusions of the Social Assessment and the Indigenous Peoples Plan and also incorporates important lessons learned form the implementation of the IPDP of the PAMBC project. These conclusions and specific recommendations have been carefully incorporated in the design of the proposed project in each of its components and activities.

The ICR of the PAMBC project reports that the design and implementation of strategies to treat indigenous peoples and the corresponding Indigenous Development Action Plan were in general highly successful. ANAM was able to consolidate a new institutional framework that transformed the approach to managing protected areas, and which was participatory and inclusive of local communities and indigenous *Comarcas*.

Institutional development and participation strategies. Successful institutional arrangements between ANAM and indigenous authorities were implemented to guarantee an effective participation of indigenous people in the planning and implementation of management and conservation in priority geographic areas of the PAMBC. Important contributions of this project

include: (i) an extensive training and communications outreach campaigns; (ii) support for the establishment of 6 Consultative Environmental Commissions (CCA) at the provincial, municipal and *Comarca* levels to promote citizen involvement and advise on environmental matters; (iii) support for the establishment of the new Comarca for the Naso-Teribe territory; and (iv) support for the establishment of the National Council for Indigenous Development. The proposed project will continue to support and build on these experiences.

Local capacity building for conservation and management of natural resources. An extensive training program was implemented in a range of topics that included project management, gender equality, technology transfer and environmental management. Some 300 indigenous leaders participated in this program. Support was also given to Regional Indigenous Congresses, *Comarca* planning units, local authorities and the newly established CCAs.

Major limitations and risks identified in capacity building activities relate to the inability of the project to respond to specific local needs of indigenous communities to strengthen both human and social capital. Training programs need to be more specifically designed to respond to these needs considering adequate technical levels and in local languages to maximize their impact to targeted indigenous groups. Training programs and technical assistance interventions also need to consider an appropriate timing to strengthen the different phases of development process that each community is experiencing.

Investments in Sustainable Management of Natural Resources. The PAMBC project was successful in supporting communities to develop investment subprojects to manage natural resources. One hundred subprojects were implemented benefiting nearly 35,000 rural inhabitants. Indigenous communities carried out 75 percent of these subprojects, accounting for 70 percent of the funding for this activity. Consultations indicate that an adequate level of appropriation of subprojects was achieved in most of these communities.

Important issues, however, need to be addressed to improve the quality and impact of these type of investments among indigenous communities. In general terms a more systematic technical support is required given the lack of experience of most communities. Subprojects also need to balance log-term environmental goals with short-term actions to increase income. Specific issues to consider include:

Technical assistance by private providers. ANAM contracted NGOs with legal recognition to help communities to identify and prepare subprojects. NGOs were also contracted to administer subproject funds on behalf of the beneficiary organizations. Not all NGOs, however, had the required local experience and technical and social skills to ensure successful results. Community leaders felt that these organizations sometimes failed to respond to specific needs contained in community action plans and that some subprojects that were ultimately presented by NGOs were not the ones that has been agreed with the community.

Economic impact of investment subprojects. Investments have had a limited impact in generating income and employment, particularly among women and young community members. In addition to a poor design and implementation of subprojects, access to local or national markets and commercialization skills of local products and services are important limitations in most communities. An important conclusion is that marketing and financial sustainability of subprojects needs to be more adequately addressed at the design stage.

Monitoring and evaluation. ANAM has had a limited capacity to supervise the design and implementation of subprojects and evaluate the important role that NGOs play in this process. This role is critical to ensure the quality of economic and environmental impacts and the continuity communities need to improve results in subsequent phases of the subproject development.

Indigenous Peoples Plan

This section presents a summary of the main elements of the IPP that were considered during project preparation and that have been mainstreamed into the project's specific components and activities (Table 2). The IPP was prepared by the GOP and is available in the project files and for public consultation in the World Bank Infoshop and on the website of MIDA.

Table 2: IPP Summary

General Objective	Main Project Activities
Participation and Strengthening of Local Governments and other Community Institutions	• Establish a permanent project promotion strategy based on participatory workshops and publications targeting specific indigenous groups and using local languages. • Conduct consultations with indigenous authorities to establish or update working agreements with MIDA and ANAM.. • Create and strengthen CCAs and ETU in indigenous *Comarcas* to improve environmental planning and sustainable management of natural resources based on a strong participatory approach. • Offer technical assistance for the legal constitution and development of community organizations. • Support other efforts to strengthen social capital including the continuous support for the formal establishment of the Naso-Tribe Territory and the strengthening of the National Council for Indigenous Development.
Capacity Building for sustainable management of natural resources and conservation of biodiversity	• Design and implement a training program to strengthen technical knowledge that responds to specific needs of indigenous communities and that takes into consideration women and the youth. • Offer specialized technical assistance to help communities design and implement sustainable productive subprojects. • Train, regulate and supervise NGOs and other private technical service providers to ensure that the assistance they offer to indigenous communities meets high standards and responds to their particular needs.
Investments in environmental management and sustainable use of biodiversity (Component 3)	• Establish co-management arrangements for protected areas between ANAM and the local governments and community organizations. • Support local indigenous governments to design, implement and supervise pilot investments in environmental management and land use plans. • Finance productive subprojects for the management of natural resources using criteria to ensure their financial and environmental sustainability and positive outcomes in income and employment for beneficiary communities.
Monitoring and evaluation	• Design and implement a participatory monitoring and evaluation system, coordinated by ANAM to ensure that project activities reach indigenous communities in response to their needs and expectations.

Borrower capacity to implement safeguard policy recommendations.

Together with World Bank safeguard procedures and application of international standards, Panama's tougher environmental regulations and capacity in recent years provide a good framework for implementing safeguard policies. Law 41 (1998), Executive Decree 57 (2000), Decree 59 (2000), and the subsequent modifications and codification of those decrees have created more robust environmental review procedures in the past 5 years. Decree 59 and its implementing regulations specifically require environmental impact analysis for a range of activities that were previously exempt. Law 41 also recognizes the rights of indigenous peoples on traditional knowledge for the management and conservation of their natural resources.

The executing capacity of ANAM has been strengthened through the PAMBC project, and will be the target of additional capacity building in the new project. Furthermore, a feature of the proposed project is a strong program of training and capacity building for public and private actors at the municipal and local levels for both project development and implementation as well as for playing a more vital role in resources and protected areas management. In terms of safeguard compliance specifically, these various levels of training will help create better conceived projects with better analysis and more accountable implementation, but EIA evaluation and clearance of subprojects and the supervision of indigenous peoples' issues will still be the responsibility of ANAM, which will receive targeted technical assistance for this purpose.

In addition to the screening and review processes and training activities described above, safeguard monitoring will also be enhanced by the project's overall monitoring and evaluation system, which will build on the lessons from previous Bank- and GEF-financed operations.. The M&E system will help monitor safeguard compliance by tracking indicators related to environmental and social goals including indigenous peoples issues.

Annex 11: Project Preparation and Supervision

PANAMA: RURAL PRODUCTIVITY PROJECT

	Planned	Actual
PCN review	05/02/2003	05/02/2003
Initial PID to PIC	06/03/2003	06/03/2003
Initial ISDS to PIC	06/03/2003	06/03/2003
Appraisal	01/22/2007	01/23/2007
Negotiations	01/31/2007	01/31/2007
Board/RVP approval	03/20/2007	
Planned date of effectiveness	06/15/2007	
Planned date of mid-term review	06/30/2009	
Planned closing date	12/31/2012	

Key institutions responsible for preparation of the project:

Ministry of Economy and Finance (MEF)
Ministry of Agricultural Development (MIDA)
National Environmental Authority (ANAM)

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Diana Rebolledo	Language Program Assistant	LCSEO
Diomedes Berroa	Sr. Operations Officer	LCOPR
Edward W. Bresnyan	Agricultural Economist	LCSER
Fabienne Mroczka	Financial Management Specialist	LCOAA
George Ledec	Lead Ecologist	LCSEN
Gerardo Segura	Sr. Rural Development Specialist	LCSER
James W. Smyle	Sr. NRM Specialist	LCSER
Juan Martinez	Sr. Social Scientist	LCSEO
Mario Castejón	Agricultural Economist	FAO/CP
Matthew A. McMahon	Lead Agriculturalist, Task Manager	LCSER
Patricia de la Fuente Hoyes	Sr. Finance Officer	LOAG1
Rosita Valencia de Estrada	Procurement Specialist	LCSPT
Solange Alliali	Senior Counsel	LEGLA
Teresa M. Roncal	Operations Analyst	LCSER

Bank funds expended to date on project preparation:

1. Bank resources: US$399,911 (FY02-FY07)
2. Trust funds: -0-
3. Total: US$399,911

Estimated Approval and Supervision costs:

1. Remaining costs to approval: US$65,000
2. Estimated annual supervision cost: US$80,000

Annex 12: Documents in the Project File

PANAMA: RURAL PRODUCTIVITY PROJECT

Government Documents

1. Agricultural Strategic Plan ("*Manos a la Obra*"), 2004-2009.
2. Government's project document (MIDA December 2006).
3. The Rural Economy and its Contribution to Reduce Rural Poverty (MIDA, Sep. 2003).
4. Panama: Poverty Maps (June 2005)
5. Systematization of experiences in the execution of community subprojects of the Panama Atlantic Mesoamerican Biological Corridor Project (ANAM, 2005).
6. Pilot Business Plans:
   - *Plan de Negocio de la Alianza* – Café de Santa Fé (MIDA, October 2006)
   - *Plan de Negocio de la Alianza* – Ñame de los Pozos (MIDA January 2007)
   - *Plan de Negocio de la Alianza* – Achiote de los Pozos (MIDA January 2007)
7. Analysis of Local Financial Institutions (January 2007)
8. Assessment of Rural Producer Associations (November 2006)

Safeguard Documents

9. Environmental Assessment and Environmental Management Plan (F. Selles, Apr. 2005).
10. Social Assessment and Participatory Plan (A.L. Moreno, Apr. 2005).
11. Indigenous Peoples Plan (A.L. Moreno, Apr. 2005).

World Bank Documents

12. Panama: Interim Strategy Note (2005)
13. Panama Poverty Assessment: Toward Effective Poverty Reduction (2006)
14. Detailed Project cost tables.
15. Financial management capacity assessment.
16. Procurement capacity assessment.

Annex 13: Statement of Loans and Credits

PANAMA: RURAL PRODUCTIVITY PROJECT

			Original Amount in US$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P098376	2007	Pub Fin & Inst Dev Policy Loan	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P055844	2002	PA Public Policy Reform TA Project	10.50	0.00	0.00	0.00	0.00	0.62	0.62	0.62
P050595	2001	PA LAND ADMINISTRATION	47.90	0.00	0.00	0.00	0.00	30.94	30.94	0.00
P052021	2001	PA BASIC EDUCATION II	35.00	0.00	0.00	0.00	0.00	8.18	8.18	0.00
		Total:	153.40	0.00	0.00	0.00	0.00	39.74	39.74	0.62

PANAMA
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2003	Aguas Panama	4.92	0.00	0.00	8.10	4.92	0.00	0.00	8.10
1999	BANISTMO	10.59	0.00	0.00	0.00	10.59	0.00	0.00	0.00
1997	Banco General S.	5.48	0.00	0.00	0.00	5.48	0.00	0.00	0.00
2000	Banco General S.	25.00	0.00	0.00	0.00	25.00	0.00	0.00	0.00
	Banco Uno - Pan	20.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00
2004	Continental-PAN	37.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
2005	Copa Airlines	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	Manzanillo	12.24	0.00	0.00	0.00	12.24	0.00	0.00	0.00
2005	Manzanillo	50.00	0.00	0.00	0.00	19.09	0.00	0.00	0.00
1999	PCRC	11.84	0.00	0.00	22.00	11.84	0.00	0.00	22.00
1999	Suinternacional	1.69	0.00	0.00	0.00	1.69	0.00	0.00	0.00
2003	UBCI	0.00	10.00	0.00	0.00	0.00	10.00	0.00	0.00
2004	UBCI	0.00	0.33	0.00	0.00	0.00	0.33	0.00	0.00
	Total portfolio:	194.26	10.33	0.00	30.10	148.35	10.33	0.00	30.10

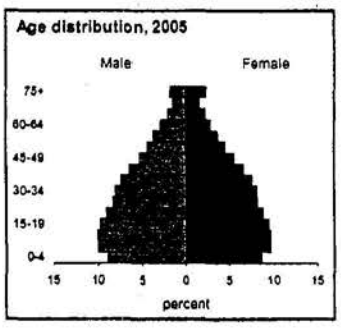
		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
2006	Ban Uno PA Swap	0.00	0.00	0.00	0.00
	Total pending commitment:	0.00	0.00	0.00	0.00

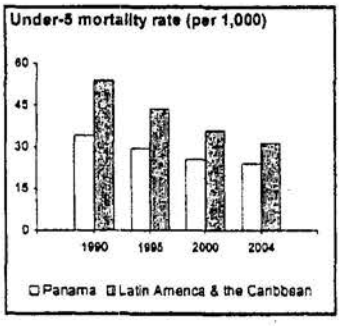
Annex 14: Country at a Glance

PANAMA: RURAL PRODUCTIVITY PROJECT

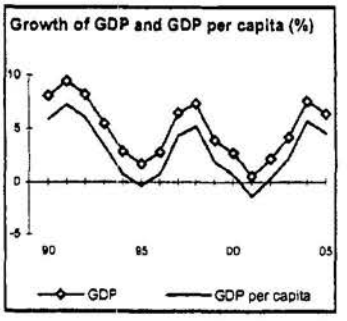
Panama at a glance

Key Development Indicators (2005)	Panama	Latin America & Carib.	Upper middle income
Population, mid-year (millions)	3.2	551	599
Surface area (thousand sq. km)	76	20,418	30,135
Population growth (%)	1.8	1.3	0.4
Urban population (% of total population)	58	78	72
GNI (Atlas method, US$ billions)	15.0	2,210	3,368
GNI per capita (Atlas method, US$)	4,630	4,008	5,625
GNI per capita (PPP, international $)	7,310	8,111	10,924
GDP growth (%)	6.4	4.4	5.5
GDP per capita growth (%)	4.5	3.1	5.0
(most recent estimate, 2000–2005)			
Poverty headcount ratio at $1 a day (PPP, %)	7	9	..
Poverty headcount ratio at $2 a day (PPP, %)	17	23	..
Life expectancy at birth (years)	75	72	69
Infant mortality (per 1,000 live births)	19	27	23
Child malnutrition (% of children under 5)	..	7	7
Adult literacy, male (% of ages 15 and older)	93	91	95
Adult literacy, female (% of ages 15 and older)	91	90	92
Gross primary enrollment, male (% of age group)	114	121	108
Gross primary enrollment, female (% of age group)	111	117	106
Access to an improved water source (% of population)	90	91	94
Access to improved sanitation facilities (% of population)	73	77	84





Net Aid Flows	1980	1990	2000	2005 [a]
(US$ millions)				
Net ODA and official aid	46	100	17	38
Top 3 donors (in 2004):				
United States	15	97	-9	9
Spain	..	6	13	7
Japan	2	2	3	6
Aid (% of GNI)	1.3	2.0	0.1	0.3
Aid per capita (US$)	23	41	6	12



Long-Term Economic Trends	1980	1990	2000	2005	1980–90	1990–2000	2000–05
					(average annual growth %)		
Consumer prices (annual % change)	13.8	0.8	1.5	*0.4*			
GDP implicit deflator (annual % change)	33.7	0.6	-1.2	2.4			
Exchange rate (annual average, local per US$)	1.0	1.0	1.0	1.0			
Terms of trade index (2000 = 100)	90	94	100	99			
Population, mid-year (millions)	1.9	2.4	2.9	3.2	2.1	2.0	1.8
GDP (US$ millions)	3,810	5,313	11,621	15,467	0.5	4.7	4.3
		(% of GDP)					
Agriculture	8.9	9.8	7.2	7.7	2.5	3.1	4.8
Industry	19.5	15.1	19.1	16.4	-1.3	6.0	1.6
Manufacturing	11.0	9.7	10.1	7.8	0.4	2.7	-1.4
Services	71.5	75.1	73.6	75.9	0.7	4.5	4.8
Household final consumption expenditure	44.9	56.9	59.9	73.1	3.8	6.4	8.0
General gov't final consumption expenditure	17.6	18.1	13.2	11.5	1.2	1.7	3.4
Gross capital formation	28.1	16.8	24.1	19.4	-9.2	10.4	3.2
Exports of goods and services	98.2	86.8	72.6	68.5	0.4	-0.4	1.0
Imports of goods and services	88.8	78.6	69.8	72.5	1.0	1.2	3.7
Gross savings	27.6	24.2	23.1	9.7	..	..	..

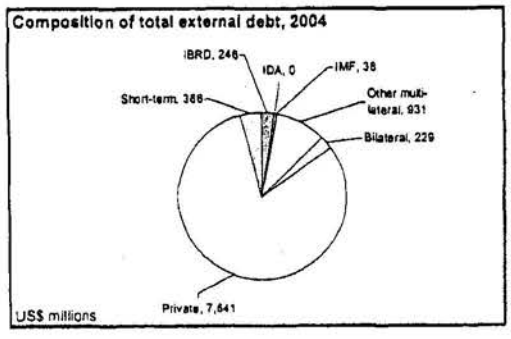
Note: Figures in italics are for years other than those specified. 2005 data are preliminary estimates. .. indicates data are not available.
a. Aid data are for 2004.

Development Economics, Development Data Group (DECDG).

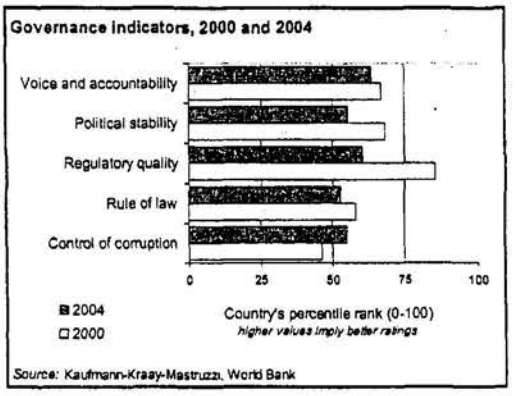
Balance of Payments and Trade	2000	2005
(US$ millions)		
Total merchandise exports (fob)	5,838	7,188
Total merchandise imports (cif)	7,655	9,963
Net trade in goods and services	-279	75
Workers' remittances and compensation of employees (receipts)	16	126
Current account balance	-715	-818
as a % of GDP	-6.2	-5.3
Reserves, including gold	707	1,211

Central Government Finance		
(% of GDP)		
Revenue	18.2	15.0
Tax revenue	9.6	8.6
Expenditure and Net Lending	19.3	18.4
Overall surplus/deficit	-1.1	-3.4
Highest marginal tax rate (%)		
Individual	30	*30*
Corporate	30	*30*

External Debt and Resource Flows		
(US$ millions)		
Total debt outstanding and disbursed	7,042	*9,469*
Total debt service	918	*1,401*
HIPC and MDRI debt relief (expected; flow)	–	–
Total debt (% of GDP)	60.6	*66.7*
Total debt service (% of exports)	9.7	*14.3*
Foreign direct investment (net inflows)	624	*1,012*
Portfolio equity (net inflows)	0	*0*



Private Sector Development	2000	2005
Time required to start a business (days)	–	19
Cost to start a business (% of GNI per capita)	–	24.8
Time required to register property (days)	–	44
Ranked as a major constraint to business (% of managers surveyed who agreed)		
n.a.	..	..
n.a.	..	..
Stock market capitalization (% of GDP)	24.0	*23.9*
Bank branches (per 100,000 people)	..	*12.9*



Technology and Infrastructure	2000	2004
Paved roads (% of total)	*34.6*	..
Fixed line and mobile phone subscribers (per 1,000 people)	285	388
High technology exports (% of manufactured exports)	0.1	2.1

Environment		
Agricultural land (% of land area)	29	*30*
Forest area (% of land area, 2000 and 2005)	57.9	57.7
Nationally protected areas (% of land area)	..	21.7
Freshwater resources per capita (cu. meters)	..	46,426
Freshwater withdrawal (% of internal resources)	..	*0.6*
CO2 emissions per capita (mt)	2.1	*2.0*
GDP per unit of energy use (2000 PPP $ per kg of oil equivalent)	7.0	*7.6*
Energy use per capita (kg of oil equivalent)	875	*836*

World Bank Group portfolio	2000	2005
(US$ millions)		
IBRD		
Total debt outstanding and disbursed	283	212
Disbursements	22	9
Principal repayments	24	39
Interest payments	21	12
IDA		
Total debt outstanding and disbursed	0	0
Disbursements	0	0
Total debt service	0	0
IFC *(fiscal year)*		
Total disbursed and outstanding portfolio	226	*294*
of which IFC own account	117	*202*
Disbursements for IFC own account	84	*56*
Portfolio sales, prepayments and repayments for IFC own account	2	*11*
MIGA		
Gross exposure	0	0
New guarantees	0	0

Note: Figures in italics are for years other than those specified. 2005 data are preliminary estimates. 9/8/06
.. indicates data are not available. – indicates observation is not applicable.

Development Economics, Development Data Group (DECDG).

PANAMA

SELECTED CITIES AND TOWNS
PROVINCE CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
PROVINCE BOUNDARIES
INTERNATIONAL BOUNDARIES

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JUNE 2007

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